

Australia's National Approach  
to 'Ecologically Sustainable  
Development':  
Success in Principle, Failure in  
Policy, Still in Prospect

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## **Candidate's Declaration**

I declare that this thesis is my own original work. It does not contain the work of others, except where due reference is made in the text and acknowledgements.

Peter Keith Burnett  
25 September 2018

## Acknowledgements

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## ABSTRACT

Why did Australia's national policies on Ecologically Sustainable Development (ESD) fail? Almost thirty years after Australia first adopted ESD as the overarching goal of national environmental policy, and with little discernible evidence of policy impact on general environmental decline over this time, the thesis seeks to answer this question by examining the need for a concept such as ESD; the coherence of the concept itself as a social goal; and, through four case studies, the coherence of policies directed to advancing ESD. The case studies consider national policy on environmental information; the National Strategy on ESD (1992); National Biodiversity Strategies from 1996 to date; and environmental impact assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). The research is based on the historical analysis of official records, with particular reference to policy advice to governments and subsequent policy statements. In this regard, the researcher had access to the records of the Department of Environment as well as to publicly available records.

The thesis argues that ESD is a necessary concept in responding to the problem of General Environmental Degradation and Depletion (GEDD), because although mainstream policy approaches, especially those based on welfare economics, are capable of making major inroads to the problem, ultimately they are not well-adapted to addressing the intergenerational nature of environmental decline. Moreover, ESD is a viable concept because it is a clear, relevant and coherent response to the broader social goal of halting and reversing GEDD, and feasible of achievement. By reference to the four case studies, the thesis goes on to argue that the policy means chosen to achieve ESD were unsuccessful because they were not well-adapted to achieving it. Beyond the more obvious direct causes of policy failure such as weak institutionalisation and under-investment, the thesis identifies possible ultimate causes of failure. While these causes include the possibility of deliberate political choices to pursue 'facade' policies that create only the appearance of pursuing ESD, the more significant reasons are more complex and stem from an initial decision to pursue this 'grand policy' goal without a commensurate 'grand policy process'. Although a grand policy process was adopted subsequently, critical decisions had already been made and the process was cut short abruptly as a result of political factors. The consequences of these failures of process include underestimation of the gravity of the problem, the implications of pursuing ESD, and the vital role of the States in environmental management under Australia's federal system.

The thesis concludes that, properly understood and incorporated into an appropriate policy framework, ESD is a coherent and viable concept, one which remains in prospect when and if society returns the problem of general environmental decline to the top of the public policy agenda.

# AUSTRALIA'S NATIONAL APPROACH TO 'ECOLOGICALLY SUSTAINABLE DEVELOPMENT': SUCCESS IN PRINCIPLE, FAILURE IN POLICY, STILL IN PROSPECT

## TABLE OF CONTENTS

### Front Matter

Candidate's Declaration	i
Acknowledgements	ii
Abstract	iii
Table of Contents	iv
List of Figures	viii
List of Tables	viii
List of Boxes	viii
List of Abbreviations	xi
Note on Style	xv
Dedication	xvi
Epigraph	xvii

<b>Chapter One</b>	<b>INTRODUCTION AND OVERVIEW</b>	<b>1</b>
1.1	The Problem of General Environmental Degradation and Depletion	3
1.2	Knowledge Context: The Placing of the Thesis in Relation to Disciplines and Other Knowledge Domains	7
1.3	A Taxonomy of Environmental Policy	16
1.4	The Research Question: To What Extent is the Failure of ESD Policies Attributable to Policy Factors?	22
1.5	Scope of Thesis, Assumptions, Definitions and Terminology	25
1.6	Research Methodology: Historical Documentary Analysis	30
1.7	Argument and Overview of the Thesis	33

<b>Chapter Two</b>	<b>THE LIMITS OF MAINSTREAM POLICY APPROACHES TO THE PROBLEM OF GENERAL ENVIRONMENTAL DEPLETION AND DEGRADATION (GEDD)</b>	<b>37</b>
2.1	Potential Environmental Gains Through Efficient Markets and Limits to these Gains	39
2.2	A Limitation of Economics: Markets Reflect Current Preferences	43
2.3	Conclusions on Mainstream Approaches as a Solution to GEDD	47
<b>Chapter Three</b>	<b>ORIGINS, MEANING AND VIABILITY OF ESD AS THE GOAL OF ENVIRONMENTAL POLICY IN AUSTRALIA</b>	<b>49</b>
3.1	Antecedents of Sustainable Development (SD)	49
3.2	Emergence and Evolution of Modern Sustainability Concepts	58
3.3	Emergence and Adoption of ESD in Australia	77
3.4	What Does ESD Mean and How Does it Differ from Other Sustainability Paradigms?	100
3.5	Is ESD a Viable Approach to Policy?	120
<b>Chapter Four</b>	<b>ENVIRONMENTAL INFORMATION AND ECOLOGICALLY SUSTAINABLE DEVELOPMENT</b>	<b>123</b>
4.1	Context and Approach	124
4.2	Emergence of Environmental Information Approaches, Concepts and Systems After Stockholm	126
4.3	Development of Environmental Information Approaches in Parallel with Sustainability Concepts from the mid-1980s to the Rio Conference 1992	138
4.4	Environmental Information Initiatives in Pursuit of Sustainability Goals	145
4.5	Evaluation of Australian National Approaches and Conclusions	175
<b>Chapter Five</b>	<b>THE NATIONAL STRATEGY ON ECOLOGICALLY SUSTAINABLE DEVELOPMENT</b>	<b>183</b>
5.1	Preliminary Matters: Federal Institutions and Institutionalisation Generally	184
5.2	Cabinet Deliberation on Implementing ESD	187

5.3	The 'ESD Process'	191
5.4	National Strategy for Ecologically Sustainable Development	198
5.5	Analysis of the Policy Substance of the NSESD	208
5.6	Implementation, Review and Fading from View of the NSESD	219
5.7	Why Was the NSESD a Policy Failure?	227
<b>Chapter Six</b>	<b>THE NATIONAL BIODIVERSITY STRATEGY AND ECOLOGICALLY SUSTAINABLE DEVELOPMENT</b>	235
6.1	Introduction and Overview	235
6.2	Literature Relevant to Biodiversity Strategy	237
6.3	Origins and Development of National Approaches to Biodiversity	241
6.4	National Strategy for the Conservation of Australia's Biodiversity (1996–2009)	249
6.5	Australia's Biodiversity Conservation Strategy 2010–2030	275
6.6	Australia's Strategy for Nature 2018–2030: Australia's Biodiversity Conservation Strategy and Action Inventory (Draft)	287
6.7	Analysis of the Biodiversity Strategy as Implementing ESD	288
<b>Chapter Seven</b>	<b>APPLYING ECOLOGICALLY SUSTAINABLE DEVELOPMENT THROUGH ENVIRONMENTAL IMPACT ASSESSMENT UNDER THE <i>ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 (EPBC Act)</i></b>	297
7.1	Preliminary Matters	299
7.2	Literature on ESD and Environmental Impact Assessment Schemes	301
7.3	Achieving ESD through <i>EPBC Act</i> Environmental Approvals: Policy Intent and Legislative Design	312
7.4	Does the <i>EPBC Act</i> Environmental Impact Assessment Process Advance the Goal of ESD?	328
7.5	Conclusions on <i>EPBC Act</i> and ESD	350
<b>Chapter Eight</b>	<b>SUCCESES, FAILURES, PROSPECTS</b>	355
8.1	Recapping the Thesis	355
8.2	To What Extent Was the Failure of ESD Policies Due to Policy Failure?	360



8.3	Is ESD Politically Viable?	370
8.4	Looking Forward: Essential Components of a Viable ESD Policy	372

## Appendices

1	Commonwealth Ministers with Environmental Responsibilities 1971–Present	377
2	Names of Departments with Primary Responsibility for the Environment 1971–Present	381
3	‘Principles Relating to The Policy Framework And Decision Making Process’ (endorsed by Australian Cabinet 1988)	382
4	Extracts from ‘Australia’s Objectives, Approaches and Priorities for the Preparatory Committee for the United Nations Conference on Environment and Development (UNCED), Brazil July 1992’	387
5	Extracts from ‘Ecologically Sustainable Development in International Development Cooperation: An Interim Policy Statement (1990)	388
6	Publications under the Australian Environmental Statistics Project (AESOP)	390
7	Australian Bureau of Statistics Environmental Information Products and Publications Related to the Environment	391
<b>Other</b>	Bibliography	394

## List of Figures

1.1 Standard Policy Cycle	11
1.2 A Framework to Measure the Progress of Societies (OECD)	14
1.3 The Measurement of Environmental Assets (UN SEEA)	15
3.1 Application on an ESD Frame to a Hypothetical Pollutant	121
4.1 Environmental Information Pyramid	125
7.1 Setting the Context for Environmental Impact Assessment	313

## List of Tables

1.1 Increasing Environmental Policy Ambition as Values Change	18
3.1 Comparison of Goal, Objectives and Principles from 1989 Statement, Intergovernmental Agreement on the Environment and National Strategy on Ecologically Sustainable Development	102–104
5.1 Analysis of Recommendations of ESD Agriculture Working Group	210–211
5.2 Analysis of Chapter 1 of NSESD (Agriculture)	214–215
7.1 Plans and Policies Under <i>EPBC Act</i> Relevant to Environmental Approval Decisions	335–336

## List of Boxes

1.1 Extracts from Major Synthesis Reports on the State of the Environment and Outlook	9
3.1 Extracts from World Conservation Strategy	64–65
3.2 Extract from Proposed Legal Principles for Environmental Protection and Sustainable Development Adopted by the World Commission on Environment and Development Experts Group on Environmental Law	72
3.3 The ‘Notable’ Principles Endorsed by Cabinet to Guide Ministers in Resolving Conflicting Land Use Claims	80

3.4 Extracts from Environment Minister's Letter to Prime Minister	83
3.5 Extracts From 'Our Country Our Future', Statement by Prime Minister Hawke	86
3.6 Extracts from ESD Discussion Paper Concerning Definition and Principles of ESD	89
3.7 Statement of Goal, Objectives and Guiding Principles from National Strategy on Ecologically Sustainable Development 1992	94
3.8 Extract from Intergovernmental Agreement on the Environment (1992)	98–99
4.1 Section 12, <i>Natural Heritage Trust of Australia Act 1996</i> (Cth)	153
4.2 Extracts from Productivity Commission Report, <i>Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies</i>	158
4.3 Extracts from Australian Bureau of Statistics Report, <i>Linking the environment and economy: Towards an integrated environmental-economic account for Australia</i>	167–168
5.1 Extracts from Prime Minister's 'Charter Letter' to Chairs, ESD Working Groups, 1990	193–194
5.2 Extracts from Departmental Minute to Prime Minister on Finalisation of ESD Strategy, 1992	203–204
6.1 Relevant Provisions of the Convention on Biological Diversity	242–243
6.2 Extracts from 1993 Cabinet Submission, 'National Strategy for the Conservation of Australia's Biological Diversity'	247
6.3 Extracts from the National Strategy for the Conservation of Australia's Biodiversity (1996)	251–252
6.4 Extracts from Australia's Biodiversity Conservation Strategy 2010–2030	276–277
6.5 Extracts from Australia's Strategy for Nature 2018–2030: Australia's Biodiversity Strategy and Action Inventory (Draft)	287–288
7.1 Extracts from Minister's Second Reading Speech on Introducing the EPBC Bill 1999	298–299
7.2 Extracts from Main Discussion Paper (1994), Commonwealth EIA Review	316–318

7.3 Extracts from Reform of Commonwealth Environment Legislation: Consultation Paper	321–322
7.4 General ESD-Related Provisions of EPBC Act Relevant to EIA Scheme	329
7.5 Sections from Part 9 Division 1 <i>EPBC Act</i>	330
7.6 Integration Principle	342
7.7 Precautionary Principle	342
7.8 Ecological Principle	344
7.9 Principle of Intergenerational Equity	345
7.10 Valuation Principle	347

## **List of Abbreviations**

ABRS	Australian Biological Resources Study
ABS	Australian Bureau of Statistics
ACF	Australian Conservation Foundation
AEC	Australian Environment Council
AESOP	Australian Environmental Statistics Project
AGPS	Australian Government Publishing Service
AIDAB	Australian International Development Assistance Bureau
ANAO	Australian National Audit Office
ANZEC	Australian and New Zealand Environment Council
ANZECC	Australian and New Zealand Environment and Conservation Council
BDAC	Biological Diversity Advisory Committee (later, ‘Council’)
Biodiversity Convention	Convention on Biological Diversity
Biodiversity Strategy	National Biodiversity Strategy of the time
CBA	Cost-Benefit Analysis
CEPA	Commonwealth Environment Protection Agency
CIA	Cumulative Impact Assessment
COAG	Council of Australian Governments
COP	Conference of the Parties (to an international convention)
CSD	Commission on Sustainable Development (UN)
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DASETT	Department of the Arts, Sport, Environment, Tourism and Territories
Democrats	Australian Democrats
DEST	Department of the Environment, Sport and Territories
DEWHA	Department of the Environment, Water, Heritage and the Arts (Australia)
DPISR	Driving forces-pressure-impact-state-response (model)
Draft 2018 Strategy	Draft Australia’s Strategy for Nature 2018–2030
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (Australia)

DSR	Driving forces-state-response (model)
DHAE	Department of Home Affairs and the Environment
DoE	Department of the Environment
DSE	Department of Science and the Environment
EC	European Commission
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
Environment Department	The department of state of the day responsible for environmental matters
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
ESD	Ecologically Sustainable Development
ETS	Emissions Trading Scheme
FDES	Framework for the Development of Environmental Statistics (United Nations)
GBRMPA	Great Barrier Reef Marine Park Authority
GEDD	General Environmental Degradation and Depletion
GEO	Global Environmental Outlook
GDP	Gross Domestic Product
GNP	Gross National Product
HMSO	Her Majesty's Stationery Office
ICESD	Intergovernmental Committee for Ecologically Sustainable Development
IGAE	Intergovernmental Agreement on the Environment
IGE	Intergenerational Equity
IMF	International Monetary Fund
IUCN	International Union for the Conservation of Nature
MNES	Matters of National Environmental Significance
NAA	National Archives of Australia
National Objectives	National Objectives and Targets for Biodiversity Conservation 2001–2005
National Report	Australia's National Report to the Conference of the Parties to the Convention on Biological Diversity
NEII	National Environmental Information Infrastructure

NCP	National Competition Policy
NCSA	National Conservation Strategy for Australia
NEIS	National Environment Information System
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NGOs	Non-Government Organisations
NPEI	National Plan for Environmental Information
NRMMC	Natural Resource Management Ministerial Council
NSESD	National Strategy for Ecologically Sustainable Development
NWI	National Water Initiative
OECD	Organisation for Economic Co-operation and Development
PC	Productivity Commission
PEP	Principles of Environmental Policy
PM&C	Department of the Prime Minister and Cabinet (Australia)
PMO	Prime Minister's Office
PMSIEC	Prime Minister's Science, Engineering and Innovation Council
PSR	Pressure-State-Response (model)
RAC	Resource Assessment Commission
Review of EIA	Public Review of the Commonwealth Environmental Impact Assessment Process
Rio Conference	United Nations Conference on Environment and Development, Rio de Janeiro, 1992
SEA	Strategic Environmental Assessment
SCEW	COAG Standing Council on Environment and Water
SD	Sustainable Development
SEA	Strategic Environmental Assessment
SEEA	System of Environmental-Economic Accounting
SMS	Safe Minimum Standards (for conservation)
SNA	System of National Accounts
SoE	State of the Environment (in reference to SoE Report)
SS	Strong Sustainability
Stockholm Conference	United Nations Conference on the Human Environment, Stockholm, 1972

Stockholm Action Plan	Action Plan for the Human Environment, agreed at Stockholm Conference
UN	United Nations
UNEP	United Nations Environment Programme
WCED	World Commission on Environment and Development
WCS	World Conservation Strategy
WS	Weak Sustainability
WWF	Worldwide Fund for Nature
1996 Strategy	National Strategy for the Conservation of Australia's Biological Diversity 1996
2010 Strategy	Australia's Biodiversity Conservation Strategy 2010–2030



## Note on Style

This thesis conforms as far as possible to the third edition of the Australian Guide to Legal Citation (3<sup>rd</sup> ed, 2010).<sup>1</sup> Because this guide does not have a style for citing archival records or unpublished government documents, the writer has adopted the following style for these, drawing on the style recommended by the National Archives of Australia:

### *Cabinet Documents*

The style is:

[Author], [‘Document Title’], [*Cabinet Submission Memorandum/Minute Number*], [Date], (National Archives of Australia (NAA) Series Number, Item Number).

For example, ‘(NAA 14217, 1266)’ refers to record 1266 (which may be a file or a discrete document such as a Cabinet submission) in series A14217, which contains files relating to a particular topic, in this example Cabinet records of the Keating Government.

Note that Cabinet minutes (which record Cabinet decisions), while bearing a unique number, have the same NAA *record* number as the Cabinet submission or memorandum to which that decision relates.

### *Documents from Departmental Files*

The style is:

[Name of Authoring Department and, where relevant, Position Title of Departmental Author], [‘Title of Document’], [Date where available], (Name of Department Holding the Record, File Number).

The various titles of the Commonwealth departments responsible for environmental matters are set out in Appendix 2. Position titles have been used rather than the names of the authoring public servants, because the documents are produced in an official rather than a private capacity.

### *Sexist Language*

Where quoted sources use sexist language, the original language has been retained.

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<sup>1</sup> Published by Melbourne University Law Review Association Inc, in collaboration with Melbourne Journal of International Law Inc.

To my father, Keith Burnett, who gave me the policy bug.

*For in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children's futures. And we are all mortal.*

John F. Kennedy



# CHAPTER ONE

## INTRODUCTION AND OVERVIEW

*Society is indeed a contract ... between those who are dead, those who are living, and those who are to be born.*

Edmund Burke (1730–1797), British philosopher and MP (Whig)<sup>2</sup>

*Après nous, le deluge* ('After us, the Flood')

Attributed to Marquise de Pompadour (1721–1764)<sup>3</sup>

The twentieth century was the first global century. With the laying of the trans-Pacific cable in 1902, the world became encircled by cable and real-time communication became possible between many major centres. With Amundsen's arrival at the South Pole in 1911, humans had reached all latitudes and longitudes, while the ascent of Mount Everest in 1953 signified that no point on Earth was beyond human reach. Indeed, within five years, with the launch of the first Sputnik satellite, humans reached beyond the globe. The world was blighted by two global wars, the second of these spawning in nuclear weapons the capacity for the global destruction of life itself. Seeking to prevent the recurrence of such disasters, humans devised global institutions of governance including the United Nations (UN). Agreeing at the Bretton Woods conference in 1944 to establish global financial institutions, humans began to manage the global economy as a single entity. This was also the era of global contest between great political ideologies, particularly between capitalism and communism during the Cold War.

The second half of the century was characterised by growth of unprecedented scale. Population more than doubled, while the global economy increased more than 15-fold. This led Steffen and colleagues to label this phenomenon 'the Great Acceleration'.<sup>4</sup> So

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<sup>2</sup> Edmund Burke, *Reflections on the Revolution in France* (ElecBook, first published 1790, 2000 ed) 123.

<sup>3</sup> Michael Mould, *The Routledge Dictionary of Cultural References in Modern French* (Routledge, 2011).

<sup>4</sup> Will Steffen, Paul J Crutzen and John R McNeill, 'The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature' (2007) 36(8) *Ambio* 614.

significant has human impact become that Crutzen and Stoermer proposed that the Earth had entered a new geological epoch, the Anthropocene, a proposal now under official consideration.<sup>5</sup> In more recent times the Great Acceleration has been propelled by emergence of globalisation itself, a movement driven by the notion that the tide of a truly global economy would lift all boats.

The Great Acceleration brought dramatic consequences for the environment, including global warming and a 'sixth great extinction'.<sup>6</sup> It can thus also be seen as a period of *general environmental degradation and depletion* (GEDD), a period when humans realised increasingly that their activities were degrading the environment and depleting natural resources on a generalised or global basis. This thesis concerns the response of humans to that realisation, in policy terms, and in one country, Australia. The international response, led by the UN, has involved global governmental conferences, the establishment of the United Nations Environment Programme (UNEP) and a special commission, the World Commission on Environment and Development, to develop a long-term response to environmental issues. The central idea emerging from these processes has been the concept of Sustainable Development (SD), made famous by the 1987 report of that commission, *Our Common Future* (Brundtland Report, or 'Brundtland', after the commission chair).<sup>7</sup> The Brundtland Report has provided the broad intellectual foundation for a vast array of environmental initiatives, including an Australian variant of SD, 'Ecologically Sustainable Development' (ESD). The thesis considers that domestic response and argues that while ESD was a successful concept, it failed in policy. With ESD now effectively a dead letter, this might be argued to be of historical interest only, except that the problem to which it responds, GEDD, continues to worsen while alternative viable policy paradigms are, depending on one's perspective, very few or even non-existent. It is time for a second look at ESD.

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<sup>5</sup> P J Crutzen and E F Stoermer, "The "Anthropocene"" (2000) 41 *IGBP Newsletter* 12; P J Crutzen, 'Geology of mankind — The Anthropocene' (2002) 415 *Nature* 23. The proposed new geological epoch is under consideration by the International Commission on Stratigraphy. Steffen argues that the Anthropocene coincides with the Great Acceleration: Will Steffen et al, 'The Trajectory of the Anthropocene: The Great Acceleration' (2015) 2(1) *The Anthropocene Review* 81; see also Jan Zalasiewicz, et al, 'When Did the Anthropocene Begin? A Mid-Twentieth Century Boundary Level Is Stratigraphically Optimal' (2015) 383 *Quaternary International* 196. This contrasts with Crutzen, who sees the Anthropocene as beginning with the Industrial Revolution, circa 1800.

<sup>6</sup> Ibid 617.

<sup>7</sup> World Commission on Environment and Development (WCED), *Our Common Future* (Oxford University Press, 1987).

## 1.1 The Problem of General Environmental Degradation and Depletion

### 1.1.1. Emergence of Economic Growth as Overriding Policy Objective

At the close of World War II, the United States of America was the epicentre of world economic power. Internationally, it was the largest economy and largest creditor nation, and its views prevailed in negotiations to establish a new global economic order under the Bretton Woods accords.<sup>8</sup> Domestically, depression, world war and the unprecedented economic demands of post-war reconstruction had pushed economists from the rear to the foremost rank of policy advisers.<sup>9</sup> Roosevelt's New Deal-era 'brains trust' was institutionalised by President Truman as the Council of Economic Advisers.<sup>10</sup> Truman was the first to articulate economic growth formally as the overarching goal of government policy, arguing in his 1946 'State of the Union' address that:

We must never lose sight of our long-term objectives: the broadening of markets—the maintenance of steadily rising demand ...

...

There is no question in my mind that the Government ... must assume the ultimate responsibility for the economic health of the Nation ...

All of the policies of the Federal Government must be geared to the objective of sustained full production and full employment ...<sup>11</sup>

Truman had institutionalised not only the centrality of economic advice to government, but the political mantra of continuous economic growth. This mantra would soon become the dominant paradigm of politics globally, culminating in the formal adoption by OECD countries of a target of raising their combined GNP by 50% between 1961 and 1970 in what Schmelzer has described as 'the hegemony of growth'.<sup>12</sup> The Great Acceleration was

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<sup>8</sup> See Ben Steil, *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White and the Making of the New World Order* (Princeton University Press, 2013).

<sup>9</sup> Galbraith described this outcome as 'something nearly unparalleled in the history of economics: the new wonderfully high prestige of economists': see John Kenneth Galbraith, *The World Economy Since the Wars: A Personal View* (Houghton Mifflin, 1994).

<sup>10</sup> The Council was established under the United States *Employment Act of 1946* 15 U.S.C. § 1021. Under section two of the Act: 'The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means ... to promote maximum employment, production, and purchasing power.'

<sup>11</sup> Harry S Truman, 'Message to the Congress on the State of the Union and on the Budget for 1947', in Harry S Truman, *Public Papers of the Presidents of the United States* (University of Michigan Library, 2005) 36, 51.

<sup>12</sup> Matthias Schmelzer, *The Hegemony of Growth: the OECD and the making of the economic growth paradigm* (Cambridge University Press 2016) 184. Schmelzer describes (at 138–141) how the 'expanding economy

a natural response to people's desire to put the privations of war behind them. But it was also a response to a new era of policy, in which governments managed the economy proactively with an overriding objective of economic growth.

### 1.1.2 Emergence of Global Environmental Concerns in 'Modern Environmental Era'

#### *Modern Environmental Era*

Occasional concerns about broad-scale environmental degradation, and responses to such concerns, some of which might now be described as sustainability concepts, can be found as far back as ancient times,<sup>13</sup> but the modern environmental era of concern about GEDD is often dated from the publication of Rachel Carson's *Silent Spring* in 1962. *Silent Spring*, which dealt with the broad-scale impacts of pesticides in the USA,<sup>14</sup> is widely credited with spawning the environmental movement that became so prominent in the subsequent decade. While this movement began in the West and concerns focused on pollution, once the global South became engaged through the UN, these concerns were soon reframed as a broader twofold concern about how to sustain the resources of the Earth and to share them among nations. This reframing can be seen by contrasting the 1968 UN resolution convening the United Nations Conference on the Human Environment (the Stockholm Conference), with the *Stockholm Declaration* produced by that conference in 1972.<sup>15</sup> The 1968 resolution is directed mostly to environmental degradation from pollution, while the *Stockholm Declaration* is cast in much broader terms of maintaining the resources of the earth, including the capacity of the environment to render pollutants harmless, for present and future generations.

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concept' was adopted by various countries for different reasons: by Western Europeans, to dispense with the need for Marshall Plan aid; by 'underdeveloped' states wanting to be modernised, by Japan, to compensate for loss of empire; and by countries in the Soviet sphere, as part of Cold War competition for economic hegemony.

<sup>13</sup> See Jacobus Du Pisani, 'Sustainable Development — historical roots of the concept', (2006) 3:2 *Environmental Sciences* 83.

<sup>14</sup> Rachel Carson, *Silent Spring* (Houghton Mifflin 1962).

<sup>15</sup> *Problems of the Human Environment*, GA Res 2398 (XXIII), UN GAOR, 23<sup>rd</sup> sess, 1733<sup>rd</sup> plen mtg, (3 December 1968); *Declaration of the United Nations Conference on The Human Environment* Stockholm, 5–16 June 1972, UN Doc. A/CONF. 48/14/Rev.1 ('*Stockholm Declaration*'), especially Principle 6. The declaration is discussed in 3.2.1.



*Concerns Peak in 1972 as Global Response Begins*

Concerns about GEDD peaked in 1972 just as governments met to develop global responses. In January, 30 of Britain's leading intellectuals, described by Stone as 'an astonishing selection of distinguished signatures', endorsed *A Blueprint for Survival*,<sup>16</sup> which proposed a transition from 'an expansionist society to a stable society', based on 'a new philosophy of life' involving minimum disruption of ecological processes; maximum conservation of materials and energy ('an economy of stock rather than flow'); a stable population and a new social system based on decentralised and largely de-industrialised communities.<sup>17</sup> Later in the year, the Club of Rome, a private 'think tank', published *Limits to Growth* ('*Limits*').<sup>18</sup> *Limits* was the first attempt to model the implications of continuing current patterns of exponential growth in population, production and consumption in the earth as a closed system.<sup>19</sup> The study concluded, startlingly, that '[t]he basic behaviour mode of the world system is exponential growth of population and capital, followed by collapse.'<sup>20</sup> Moreover, 'solving' the supply of particular factors in the model, for example by assuming that non-renewable resources were substituted by 'unlimited' nuclear power, did not avoid collapse but simply changed its primary precipitating factor, in this instance from the exhaustion of non-renewables to pollution.<sup>21</sup> Further 'solving' — for example by assuming a 75% reduction in pollution — simply changed the precipitating factor of collapse again, in this case to running out of arable land.<sup>22</sup> The study concluded that a 'global equilibrium' state of constant population and capital was required.<sup>23</sup> As collapse was modelled to occur within a century, drastic action was required: exponential growth of population and industrial output would need to cease by 2000.<sup>24</sup>

While a detailed examination of *Limits* and the extensive scholarly criticisms made of it is beyond scope, the key point here is that *Limits* was published immediately before the

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<sup>16</sup> Edward Goldsmith et al (eds), *A Blueprint for Survival* (Penguin, 1972); Peter Stone, *Did We Save the Earth at Stockholm?* (Earth Island, 1973) 8, 55.

<sup>17</sup> Goldsmith et al, above n 16, 14, 34–35, 60.

<sup>18</sup> Donella H Meadows, Edward I Goldsmith and Paul Meadow, *The Limits to Growth* (Earth Island, 1972).

<sup>19</sup> The study applied a model called World:3, an evolution of the World:2 model based on the systems dynamics work of Professor Jay Forrester of the Massachusetts Institute of Technology.

<sup>20</sup> Meadows, Goldsmith and Meadow, above n 18, 142.

<sup>21</sup> Ibid 130–133.

<sup>22</sup> Ibid 133–137.

<sup>23</sup> Ibid 164–167. The authors point out that this does not require stagnation, only, drawing directly on the steady state advocated by Mill, that development could not consume additional resources (at 170, 175).

<sup>24</sup> Ibid 166–167.

commencement of the Stockholm Conference and attracted global interest.<sup>25</sup> What might be described as 'peak environmental concern' coincided with 'full engagement' by governments, although those concerns were soon displaced significantly by the 1973 global 'oil shock', the result of an embargo imposed by oil-producing nations. This shifted the political agenda to focus on security of natural resource supply and global environmental concerns would not peak again until the late 1980s, but even so, many countries had already established stand-alone environment agencies and the Stockholm Conference had led to the establishment of the United Nations Environment Programme (UNEP). Global environmental depletion and degradation would remain an ongoing policy concern.

### 1.1.3 Not Just a Wicked Problem, but Requiring a 'Tragic Choice'

The problem of GEDD has all the characteristics of Rittel's and Weber's 'wicked problem'.<sup>26</sup> It is difficult to define, not only biophysically, due to scientific uncertainty, but socially: not only are there divergent views in a pluralist society, but there is a plurality of societies. The problem lacks a clear 'solution', because there are innumerable ways to husband limited resources. And GEDD requires moral, 'good or bad' rather than 'true or false' choices about major issues, especially the value of both nature and future generations. As Rittel and Webber put it: 'The formulation of the problem *is* the problem!'<sup>27</sup>

Global environmental depletion and degradation also has the characteristics of a wicked problem vis-a-vis solutions. Attributes of the problem are interconnected, so that 'solving' one dimension often exacerbates another, as *Limits* demonstrated. And the consequences of choosing a policy response that does not 'solve' the problem may be drastic: to borrow a 1960s metaphor, GEDD is a 'moonshot' problem, where a near miss could be as much a failure as a failure to launch.<sup>28</sup> As Dovers puts it, sustainability problems are different in kind and degree, raising issues of novelty, urgency, morality, cumulation, complexity and uncertainty. Moreover, potential solutions must overcome a misalignment of: cycles, with natural systems often functioning over periods vastly longer than those of politics and policy; scales, with spatial scales in nature ignoring political boundaries; and relativities, with

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<sup>25</sup> Note that, despite the criticisms, a 2008 study by Turner comparing 30 years of data with the 'standard run' scenario modelled in *Limits* found a high degree of alignment between the two: Graham L Turner, 'A Comparison of The Limits to Growth with 30 Years of Reality' (2008) 18 *Global Environmental Change* 397.

<sup>26</sup> Horst WJ Rittel and Melvin M Webber, 'Dilemmas in a General Theory of Planning' (1973) 4(2) *Policy Sciences* 155.

<sup>27</sup> Ibid 161 (original emphasis).

<sup>28</sup> Rittel and Webber capture a similar sentiment with their notion that '[T]he planner has no right to be wrong': see Rittel and Webber, above n 26, 166, heading 10.

sustainability issues invoking the possibility of absolute limits to human activities and (absolute) irreversibility, leaving the mainstays of political resolution: redistribution and compromise ‘of questionable utility’.<sup>29</sup>

The problem may be wicked, but effective responses, including ESD, are, in Dror’s terms, a ‘tragic choice’ because they require society to choose between present and future needs while coping with the ‘congenital defect of democracy’ that future generations, although affected by present decisions, do not vote.<sup>30</sup> Under ESD, the effect of the ‘congenital defect’ in common parlance is that the pain is immediate but the gain is deferred; in crude political terms the ‘winners’ are mostly unborn and thus unrepresented in politics, while the ‘losers’ are most likely those with the largest vested interests and thus the greatest political power. Moreover, in seeking merely to *constrain* the growth paradigm, rather than to replace it (as argued in chapter three), ESD pits ever-increasing demand against often fixed constraints on supply. It sets the short-term demands of the political cycle against the long-term needs of policy.

To return to the epigraphs at the head of this chapter, in adopting ESD Australia, on the face of it, chose the ‘moral option’ of the Burkean contract between the generations rather than consign future generations to ‘*le deluge*’ as the Marquise de Pompadour would have done. But we have not stayed this difficult course. The thesis will argue that the primary approach of governments in attempting to escape the resulting tension between ‘shoulds’ and ‘wants’ was, whether by design or lack of insight, to adopt ineffectual policies that served little more than to create the impression that we could ‘have our cake and eat it too’. Meanwhile, the problem only worsened.

## 1.2 Knowledge Context: The Placing of the Thesis in Relation to Disciplines and Other Knowledge Domains

As sustainability policies must reconcile economic and social objectives in a context of complexity and uncertainty, the thesis must draw on several knowledge domains. It must therefore define its own trans-disciplinary conceptual context.

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<sup>29</sup> Stephen R Dovers, ‘Sustainability: Demands on Policy’ (1996) 16(3) *Journal of Public Policy* 303, 310–311.

<sup>30</sup> Yehezkel Dror, ‘Training for Policy Makers’ in Michael Moran, Martin Rein and Robert E Goodin (eds) *The Oxford Handbook of Public Policy* (Oxford University Press 2006) 80, 83.

### 1.2.1 The Scientific Context

Human impacts on the environment, and the science of understanding and responding to those impacts, form the backdrop to this thesis. Except where something more specific is called for, the thesis takes as given official syntheses of relevant science, as found in major government-commissioned reports such as 'state of the environment' (SoE) and 'global outlook' reports. These reports can now draw on nearly four decades of data and experience, with the first international SoE report, covering OECD countries, produced in 1979 and the first Australian SoE report published in 1985.<sup>31</sup> Outlook reporting dates from UNEP's Global Environmental Outlook (GEO) 1 report in 1997;<sup>32</sup> the OECD also publishes an outlook report, most recently in 2012.<sup>33</sup> There are also major sector-specific reports, most significantly on biodiversity and climate change.<sup>34</sup>

The consistent picture presented by these reports is of a global environment in ongoing decline, with a systematic review of 94 studies in 2017 concluding that the global environment has continued to deteriorate.<sup>35</sup> Several brief extracts from major environmental reports, both international and Australian, suffice to encapsulate the general situation and outlook (Box 1.1).

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<sup>31</sup> *State of the Environment in OECD Member Countries* (OECD, 1979); Department of Arts, Heritage and Environment, *State of the Environment in Australia 1985* (AGPS, Canberra, 1985).

<sup>32</sup> United Nations Environment Program, *Global Environmental Outlook 1* (UNEP 1997). These reports are now published approximately five-yearly, most recently in 2012: see United Nations Environment Programme, *Global Environment Outlook GEO 5: Environment for the Future We Want* (UNEP 2012).

<sup>33</sup> Organisation for Economic Cooperation and Development, *OECD Environmental Outlook 2012: The Consequences of Inaction* (OECD 2012).

<sup>34</sup> The Convention on Biological Diversity has produced the *Global Biodiversity Outlook* since 2001, most recently in 2014: see Secretariat of the Convention on Biological Diversity, *Global Biodiversity Outlook 4: A mid-term assessment of progress towards the implementation of the Strategic Plan for Biodiversity 2011–2020* (Secretariat of the Convention on Biological Diversity 2014). The *Millennium Ecosystem Assessment* of 2005 was a once-only publication but has been very influential, including for its adoption of the now-prevalent 'ecosystem services paradigm'. See especially the fifth volume of this work, the Summary for Decision-Makers: Millennium Ecosystem Assessment (Program) (eds), *Our Human Planet: Summary for Decision-Makers* (Island Press, 2005). The Intergovernmental Panel on Climate Change (IPCC) has produced a report every five to seven years since 1990, most recently in 2014: see Intergovernmental Panel on Climate Change, *Intergovernmental Panel on Climate Change, Climate Change 2014: Impacts, Adaptation, and Vulnerability: Summary for Policymakers* (IPCC, 2014).

<sup>35</sup> Michael Howes et al, 'Environmental Sustainability: A Case of Policy Implementation Failure?' (2017) 9(2) *Sustainability* 165.

**Extract from *OECD Environmental Outlook 2012***

The combination of no new policies and continuing socio-economic trends constitutes this study's "Baseline" scenario ... Under the Baseline, pressures on the environment from population growth and rising living standards will outpace progress in pollution abatement and resource efficiency. As a result, continued degradation and erosion of natural environmental capital are expected to 2050 and beyond, with the risk of irreversible changes that could endanger two centuries of rising living standards ...<sup>36</sup>

**Extract from *Global Biodiversity Outlook 4***

Extrapolations for a range of indicators suggest that based on current trends, pressures on biodiversity will continue to increase at least until 2020, and that the status of biodiversity will continue to decline ...

...

Plausible pathways exist for achieving the 2050 vision for an end to biodiversity loss, in conjunction with key human development goals, limiting climate change to two degrees Celsius warming and combating desertification and land degradation. However, reaching these joint objectives requires changes in society, including much more efficient use of land, water, energy and materials, rethinking our consumption habits and in particular major transformations of food systems.<sup>37</sup>

**Extract from *Australia State of the Environment 2017, 'Headlines'*****Overall findings**

During the past 5 years, environmental policies in Australia have had some notable success in improving the state and trend of parts of the Australian environment.

Australia's built environment, natural and cultural heritage, and marine and Antarctic environments are generally in good condition. The condition of the environment in certain areas is, however, poor and/or deteriorating. These include the more populated coastal areas and some of the growth areas within urban environments, where human pressure is greatest (particularly in south-eastern Australia); and the extensive land-use zone of Australia, where grazing is considered a major threat to biodiversity ...

**Pressures affecting the environment**

The main pressures affecting the Australian environment today are the same as in 2011: climate change, land-use change, habitat fragmentation and degradation, and invasive species. There is no indication that these have decreased overall since 2011 ...

In addition, the interactions between pressures can result in cumulative impacts, amplifying the threat faced by the Australian environment.

Climate change is an increasingly important and pervasive pressure on all aspects of the Australian environment ... Evidence shows that the impacts of climate change are increasing, and some of these impacts may be irreversible.

A legacy of extensive land clearing and the current clearing policies in some jurisdictions continue to cause loss of biodiversity (including the loss and fragmentation of native vegetation) ...<sup>38</sup>

**Box 1.1 Extracts from Major Synthesis Reports on the State of, and Outlook for, the Environment**

<sup>36</sup> OECD, *OECD Environmental Outlook 2012: The Consequences of Inaction* (OECD, 2012) 20.

<sup>37</sup> *Global Biodiversity Outlook 4: A mid-term assessment of progress towards the implementation of the Strategic Plan for Biodiversity 2011–2020* (Secretariat of the Convention on Biological Diversity, 2014).

<sup>38</sup> W J Jackson et al, Department of the Environment and Energy, *Australia State of the Environment 2016* (Department of the Environment and Energy, 2017) x-xii, available at <<https://trove.nla.gov.au/version/244187428>> (viewed on 14 February 2018) ('SoE Report 2016'). While this report has an 'outlook' section, it is not comparable with the OECD outlook as it talks only in very general terms about the need to strengthen policy.

Despite the slightly more optimistic tone of the Australian report, these reports make for sober reading. Yet there may still be large scope for successful policy action. A recent Australian-led assessment even concluded, over-optimistically on the argument of this thesis, that resource efficiency alone could secure major environmental gains by 2050, while increasing economic growth.<sup>39</sup>

### 1.2.2 Approach to Public Policy

Lasswell's original vision for the 'policy sciences' was to combine knowledge about the policy-making process itself with:

the assembling and evaluation of knowledge — from whatever source — which appears to have an important bearing upon the major policy problems of the time.<sup>40</sup>

This thesis seeks to be true to that vision of combining subject-matter knowledge with the insights of policy science into policy-making. In this respect the thesis is trans-disciplinary, but only in the sense of what Max-Neef has described as 'weak transdisciplinarity': it draws upon and seeks to synthesise knowledge from all disciplines relevant to the topic, but without seeking to go beyond traditional methods of research or reasoning as would occur in 'strong transdisciplinarity'.<sup>41</sup> In other words, the thesis does not seek to challenge disciplinary tenets, but, unconstrained by disciplinary boundaries, it does draw conclusions about the extent to which certain disciplinary tenets or approaches are more or less useful in solving the problem.

#### *Policies as Responses to Problems*

As the thesis is directed to the substance of ESD, and only incidentally to policy processes, it takes the insights of the public policy discipline concerning the policy process as given. In particular, it takes as a starting point for analysis Dovers' and Hussey's framework for environment and sustainability policy, the most comprehensive framework specific to

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<sup>39</sup> Steve Hatfield-Dodds, 'Assessing Global Resource Use and Greenhouse Emissions to 2050, with Ambitious Resource Efficiency and Climate Mitigation Policies' (2017) 144 *Journal of Cleaner Production* 403.

<sup>40</sup> Harold D Lasswell, 'The Policy Orientation' in Harold D Lasswell and Daniel Lerner (eds), *The Policy Sciences: Recent Developments in Scope and Method* (Stanford University Press, 1951), 14.

<sup>41</sup> See Manfred A Max-Neef, 'Foundations of Transdisciplinarity' (2005) 53(1) *Ecological Economics* 5.

environment and sustainability.<sup>42</sup> Under that framework, the policy process is divided into four stages: problem-framing, where issues are debated and the problem constructed; policy-framing, where guiding principles are identified and policy goals defined; policy implementation, where policy instruments are selected and other implementation tasks, eg resource allocation, undertaken; and policy monitoring and evaluation, to enable learning and enhance performance.<sup>43</sup> Under this framework, ESD is a social goal adopted in response to the problem of GEDD, while policy-framing requires that policy principles (ESD principles) be identified to guide policy development. (Policy implementation is beyond scope: see below.)

Dovers' and Hussey's framework is a sustainability-specific variant of the five-stage general policy cycle found in many public policy texts. This general cycle is referred to at various points in the thesis and is thus reproduced in Figure 1.1.



**Figure 1.1 Standard Policy Cycle<sup>44</sup>**

### *General Analytical Approach*

Consistent with Lasswell's original vision that policy science would combine its insights into the policy process with the findings of relevant disciplines, policy science itself has no overarching normative theory of policy design. While there is a literature concerning the

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<sup>42</sup> Stephen Dovers and Karen Hussey, *Environment and Sustainability: A Policy Handbook* (2<sup>nd</sup> ed, The Federation Press, 2013).

<sup>43</sup> Ibid, chapter four.

<sup>44</sup> For a discussion of the policy cycle, see Michael Howlett, M Ramesh and Anthony J Perl, *Studying Public Policy: Policy Cycles and Policy Subsystems* (Oxford University Press, 3<sup>rd</sup> ed, 2009) 10–11. Variants of this cycle are found in a number of public policy texts.

design of policy *implementation*,<sup>45</sup> this relates primarily to instrument choices and policy mixes, (ie 'tool selection') whereas the thesis addresses anterior stages concerned with goals and principles. Guidance on policy substance must come therefore from first principles and disciplines beyond policy science.

On first principles, Howlett, Ramesh and Perl point out that policy-making can be characterised as 'applied problem solving' which involves 'articulating policy goals through policy deliberations and discourses and using *policy tools* in an attempt to attain those goals'.<sup>46</sup> In other words, policy is based on an 'ends-means' paradigm. While goal selection in some cases will be a simple task of matching a solution to a problem (eg random breath-testing to reduce drink-driving), goal selection in relation to a wicked problem such as GEDD, turns out, as discussed, to be 'an extraordinarily obstinate task'.<sup>47</sup>

Although commitment to the goal of ESD is assumed (see 1.5.1), for a goal as complex as ESD, which seeks to integrate the often-competing goals of conservation and economic welfare with a normative principle of intergenerational equity, there is also a second question of whether the goal is coherent. Finally, there must be a viable means of achieving the goal — viable not only in the sense that one or more means of achieving the goal are technically feasible and not disproportionate, but also in the sense of being likely to find political and social support in a contemporary liberal-democratic society. (This, for example, would rule out approaches involving socialisation of the means of production or confiscation of property without fair compensation.) Thus, answering the research question will require an analysis of whether ESD is a *clear* and *coherent* policy goal, *viable* of achievement. Because these are theoretical criteria, specific failings of actual policies, such as the adoption of a sub-optimal policy instrument, under-resourcing (unless gross), or poor administration are beyond scope.<sup>48</sup> A policy that meets these criteria of clarity, coherence and viability is described here as 'well-adapted'.

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<sup>45</sup> Ibid 168–175. There are also complete works on policy instruments, such as Christopher C Hood and Helen Z Margetts, *The Tools of Government in the Digital Age* (Palgrave Macmillan, 2007).

<sup>46</sup> Ibid 4 (original emphasis).

<sup>47</sup> Rittel and Webber, above n 26, 157.

<sup>48</sup> The qualification to this is that a finding that resourcing was *grossly* inadequate would be grounds for concluding that the policy was not a genuine effort to advance ESD.



### 1.2.3 Relationship of Public Policy to Political Considerations

This thesis is directed primarily to the policy dimension of ESD. Of course, political support is essential to the acceptability of any policy: as Easton points out, politics is the *authoritative* allocation of values.<sup>49</sup> Yet ideas are distinct from power, even though they mingle in politics to the point that many languages do not have separate terms for ‘policy’ and ‘politics’.<sup>50</sup> As a result, policy coherence and viability are worth studying in their own right as necessary conditions for policy success.

#### *Sustainability Policy Distinguished from Sustainability Discourse*

Much of the literature on sustainability concerns sustainability discourse. As Dryzek puts it:

Discourses construct meanings and relationships, helping define common sense and legitimate knowledge ... Discourses coordinate the actions of large numbers of people and organisations who do not otherwise need to interact. This role is especially important where more formal sources of coordination are weak or absent — such as in global politics, where ... environmental affairs have been coordinated by the discourse of sustainable development.<sup>51</sup>

While sustainability discourse and sustainability policy are clearly related and share some concepts and language, the discourse literature is beyond scope here because discourse is rooted in politics and more concerned with contest over social values and political narrative than with the merits of policy approaches to achieve agreed social goals.

### 1.2.4 Conceptual Framework: Anthropocentric Approach and the ‘Environmental-Economic System’

#### *Anthropocentric Approach*

There are two basic philosophical approaches to the environment, the ecocentric and the anthropocentric. Ecocentric approaches consider the value and function of the environment independent of its usefulness to humans, while anthropocentric approaches

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<sup>49</sup> David Easton, *A Systems Analysis of Political Life* (University of Chicago Press, Phoenix ed, 1979) 350.

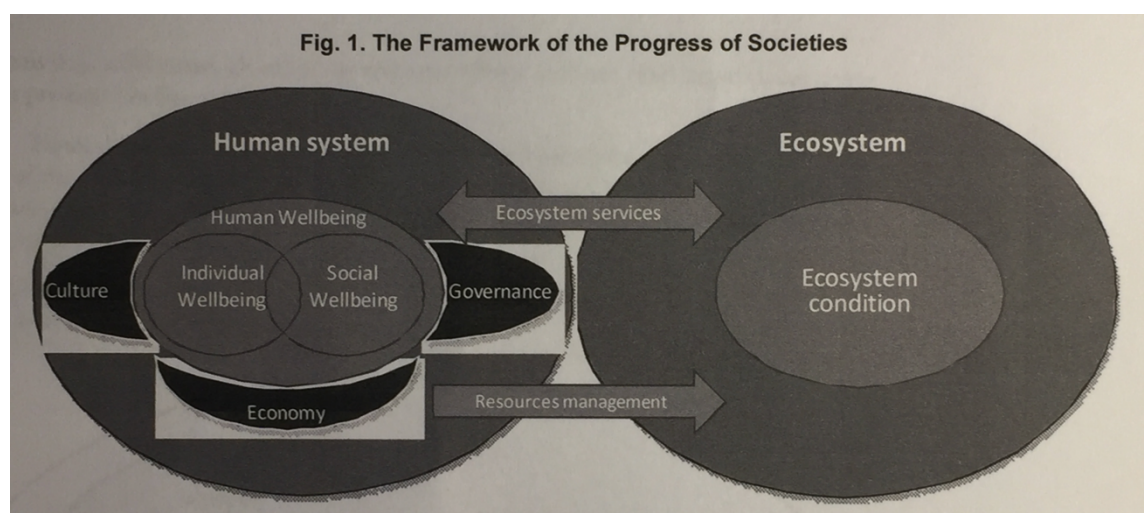
<sup>50</sup> Dror, above n 30, 81–82.

<sup>51</sup> John Dryzek, *The Politics of the Earth: Environmental Discourses* (Oxford, 3<sup>rd</sup> ed, University Press 2013) 9–10.

are utilitarian, viewing the environment in terms of its uses and usefulness from a human perspective.<sup>52</sup> This thesis assumes an anthropocentric approach simply because that is the dominant view in public policy.<sup>53</sup> Under an anthropocentric approach, the primary function of the environment becomes one of meeting human needs and aspirations by supplying the economy with goods and services and absorbing residuals from the economy (wastes).

### *Relationship of Economy to Environment: the 'Environmental-Economic System'*

The proposition that the economy operates within or is dependent upon the environment is a key element of the thesis' conceptual framework. This obvious yet significant fact, only given prominence in the literature in the early 1990s and until relatively recently found only as a foundational assumption of the non-mainstream discipline of ecological economics, is now a broadly accepted proposition, as can be seen from figures 1.2 and 1.3, taken respectively from an OECD publication and a UN statistical standard respectively.<sup>54</sup> The OECD figure has also been used by the Australian Bureau of Statistics (ABS) in Australia.<sup>55</sup>



**Figure 1.2 A Framework to Measure the Progress of Societies (OECD)<sup>56</sup>**

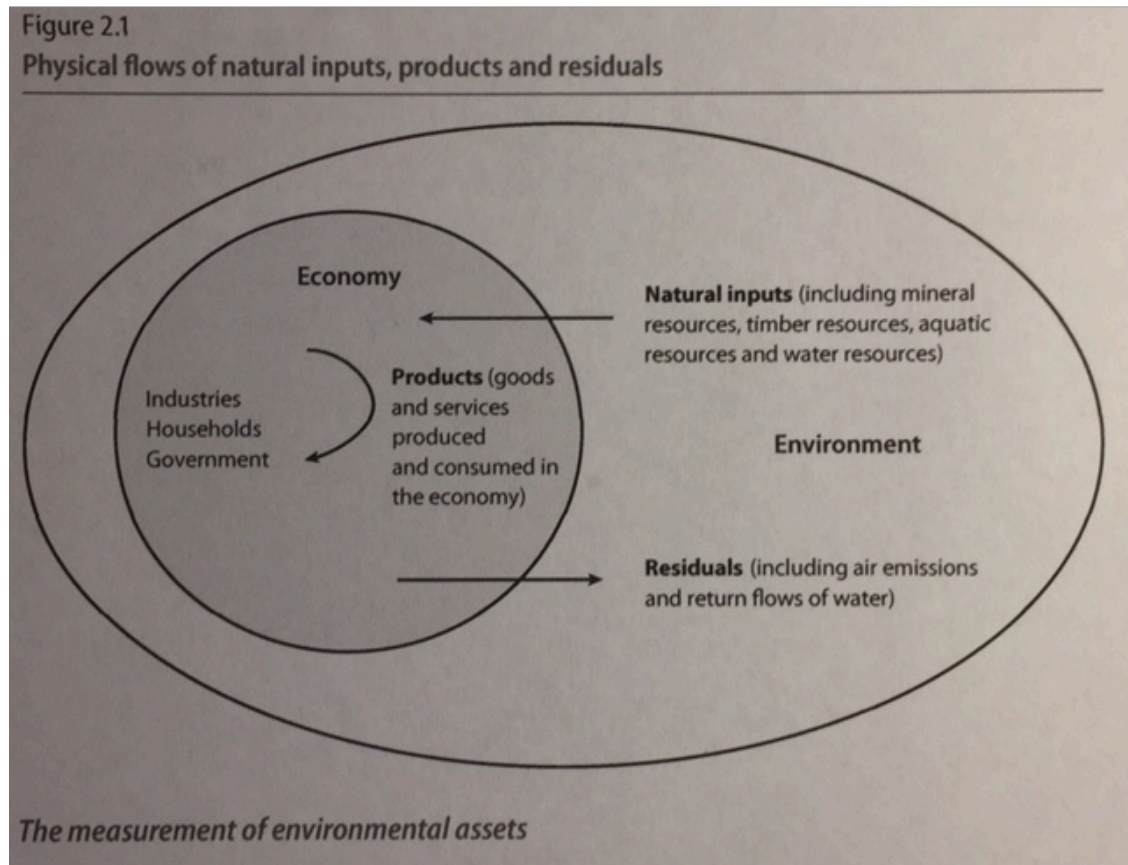
<sup>52</sup> See for example John O'Neill, Alan Holland and Andrew Light, *Environmental Values* (Routledge, 2008) 6–8.

<sup>53</sup> Ibid 6.

<sup>54</sup> See Robert Costanza, 'Goals, Agenda and Policy Recommendations for Ecological Economics' in Robert Costanza (ed), *Ecological Economics: The Science and Management of Sustainability* 2–7; Jon Hall et al, 'A Framework to Measure the Progress of Societies' OECD Statistics Working Paper 2010/05 (OECD 2010); United Nations et al, *System of Environmental-Economic Accounting 2012 — Central Framework* (UN 2014) (*SEEA Central Framework*). Cleveland canvasses the historical attitude of economics to biophysical factors in Cutler J Cleveland, 'Biophysical Economics: Historical Perspective and Current Research Trends' (1987) 38(1) *Ecological Modelling* 47.

<sup>55</sup> Australian Bureau of Statistics, 'Future directions for measuring Australia's progress', Feature Article, *Measures of Australia's Progress*, (ABS 2010) 13.

<sup>56</sup> Jon Hall et al, 'A Framework to Measure the Progress of Societies' OECD Statistics Working Paper 2010/05 (OECD 2010) <http://dx.doi.org/10.1787/5km4k7mnrkzw-en>, figure 1.



**Figure 1.3 The Measurement of Environmental Assets (UN)<sup>57</sup>**

While some scholars, notably Simon, argue that the environment does not limit the economy because substitution and human ingenuity can solve resource scarcity,<sup>58</sup> (a proposition that obviously has some validity, as illustrated by the current emergent transition from fossil- to renewable-fuels) no scholar challenges the underlying facts, drawn to general attention only in the 1960s by Boulding and Georgescu-Roegen,<sup>59</sup> that the economy is ultimately dependent on the environment, first because the earth is a closed physical system except for energy received from the sun and second because humans are dependent on earth systems such as the climate for their survival. The question for policy is whether the implications of this relationship are proximate.

With the argument already made above that GEDD is a major and worsening problem, the relationship between the economy and the environment is of immediate relevance in devising policy responses. Specifically, the implication of the dependence of the economy

<sup>57</sup> United Nations et al, *SEEA Central Framework*, above n 54 (United Nations, 2014), figure 2.1.

<sup>58</sup> Julian Simon, *The Ultimate Resource II* (Princeton University Press 1996).

<sup>59</sup> The insights of these authors are discussed in 3.1.3.

on the environment as illustrated in figure 1.3 is that the ultimate object of environmental policy is to sustain the 'environmental-economic system' in which the economy operates within the environment, on which it depends for ongoing supplies of environmental resources in the broadest sense (ie including life-support functions), and to do so in a manner that meets human needs and aspirations. This conception of human interaction with the environment as a 'complex system of cause and effect' emerged in the 1980s, not just in the Brundtland Report,<sup>60</sup> but also in the literature.<sup>61</sup> With the environmental-economic system now recognised in the UN System of Environmental-Economic Accounting (SEEA) as the official international standard for statistical analysis of the interaction of the environment and economy, the challenge for policy is to apply that paradigm in analysis for better policy outcomes, just as the publication in 1952 of the original System of National Accounts (SNA) facilitated more sophisticated economic policy analysis.<sup>62</sup> The thesis will argue that such an analysis has been possible with increasing facility since Australia adopted ESD as a policy goal in 1989, but has never been undertaken, despite government commitments to do so.<sup>63</sup>

One clear advantage of taking the environmental-economic system as a starting point for sustainability policy is that it immediately resolves one of the fundamental policy debates. Various authors have asked whether sustainability policy seeks to sustain the economy or the environment.<sup>64</sup> Clearly the answer is 'both'.

### 1.3 A Taxonomy of Environmental Policy

As the thesis discusses a range of complex and overlapping approaches to environmental and sustainability policy, it is useful to understand the relationship of these approaches to each other. Table 1.1 seeks to do this diagrammatically, and in particular to place sustainability paradigms in relation to other approaches. The figure is heuristic only. Although the approaches are arranged vertically, it is not a ladder. Rather, increasing depth

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<sup>60</sup> WCED, above n 7, 37.

<sup>61</sup> See for example Charles Perrings, *Economy and Environment: A Theoretical Essay on the Interdependence of Economic and Environmental Systems* (Cambridge University Press, 1987).

<sup>62</sup> Organisation for European Economic Co-Operation National Accounts Research Unit, *A Standardised System of National Accounts* (OEEC, 1952) ('SNA').

<sup>63</sup> See chapter four.

<sup>64</sup> See for example Clive Hamilton, 'Ecologically Sustainable Development: Implications for Governance in Australia' (1992) 69(May 1992) *Canberra Bulletin of Public Administration* 65, 67.

of shading reflects increasing levels of environmental policy ambition as values become more environment-centric, while the shading also indicates that some different policy approaches are broadly equivalent in ambition.

Underlying Values	Policy Approach	Rationale	Nature of Policy Intervention
TIER 6 Inherent Value of Nature	6 Ecocentrism	Inherent value of nature	Strong legal protection for nature – offences & strict regulation
TIER 5 Duty of Intergenerational Equity	5.4 Steady State Economy	Human consumption depleted natural capital. Size of economy must be constrained to environmental capacity.	Measures necessary to constrain size of economy, if necessary including strict measures eg birth licences
	5.3 Ecologically Sustainable Development	As for economic efficiency plus maintain biodiversity & ecological function to support human quality of life for all generations.	Constraints on environmental resource/natural capital consumption to maintain biodiversity/ecological function (or compensate through offsets)
	5.2 Strong Sustainability	As for economic efficiency plus maintain capacity of natural capital base to ensure economic welfare for all generations. Critical natural capital not substitutable	As for economic efficiency, plus measures to maintain capital, including environmental capital, eg invest in environmental restoration
	5.1 Weak Sustainability	As for economic efficiency plus maintain productive capacity through constant capital rule. Capital infinitely substitutable	As for economic efficiency, plus maintain natural capital
TIER 4 Economic Efficiency	4.3 Green Growth	Economic growth depends on maintaining natural capital	Set SMS eg maximum safe yield
	4.2 Safe Minimum Standards (SMS)	Price not a sufficient signal to prevent loss of social net revenues if productive capacity lost	Internalise externalities, eg pollution taxes Economic instruments, eg pollution taxes; emissions trading (For EM, production efficiency standards)
	4.2 Economic Efficiency (also 'Strong Policy Integration' ('Environmental Modernisation' variant))	Comprehensive and informed markets will allocate environmental resources efficiently. (EM emphasises production efficiency)	Pollution & product standards (usually subject to CBA – ie to demonstrated economic efficiency)
TIER 3 Environmental Quality Important to Quality of Life	3.1 Environment Protection (also 'Environment Quality')	Protecting health and environmental quality (especially amenity) increases quality of life	Decisions consider environment, eg EPBC Act EIA Scheme
TIER 2 Environmental Impacts are Ubiquitous	2. Weak Policy Integration (also 'Balancing')	Environmental externalities are ubiquitous, so consider routinely & balance with other factors	Case by case eg halt ozone layer depletion
TIER 1 Pragmatism	1. Case-specific approaches	Deal with problems as they arise	

**Table 1.1: Increasing Environmental Policy Ambition as Values Change** (Shading darkens with increasing ambition, but different approaches may have equal ambition)

### 1.3.1 Case-Specific Approaches (Policy Tier One)

Policy Tier 1 covers case-specific approaches. These reflect a pragmatic approach to environmental problems, with no sense that environmental problems are connected. This does not imply that the environmental problem is minor or the policy approach poorly conceived. It simply reflects a decision to address problems discretely. For example, international action to repair the ozone layer followed accidental identification of the problem; nations agreed that the consequences were unacceptable and collaborated to require the phasing out of certain chemicals in favour of substitutes, with positive results.<sup>65</sup>

### 1.3.2 Weak Policy Integration (Policy Tier Two)

It was not until the late 1960s that a consensus began to emerge that environmental problems were different manifestations of one all-encompassing problem (GEDD). Once the problem was seen as ubiquitous and systemic, decision-makers started to consider general solutions. One early-emerging approach, described here as ‘weak policy integration’, required that the environment be considered along with economic and social matters, but without any prescription as to how environmental and non-environmental considerations were to be reconciled. In some cases there seems to have been a tacit assumption that once decision-makers were aware of environmental impacts, they would ‘do the right thing’. For example, Australia’s first environmental impact assessment law, the *Environment Protection (Impact of Proposals) Act 1974* (Cth) (repealed), simply required decision-making ministers to assess environmental impacts and take them into account.<sup>66</sup> This thesis will argue that the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (‘EPBC Act’), although more complex and nuanced than its predecessor, also conforms broadly to this tier.

In 1987 the Brundtland Report would stress the importance of policy integration, which would come to be seen as an essential component of sustainability policies. This is by no means to suggest that the report saw policy integration as a *sufficient* condition for sustainability, yet some Australian discourse has implied this by referring to the ‘balancing’ of environmental and non-environmental considerations. A typical example is a 1997 ministerial statement concerning the National Oceans Policy, in which the Prime Minister

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<sup>65</sup> See the *Montreal Protocol on Substances that Deplete the Ozone Layer*, opened for signature 16 September 1987, 1522 UNTS 3 (entered into force 1 January 1989). For a general description of the ozone problem and the international response, see Marco Gonzalez, Kristen N Taddonio and Nancy J Sherman, ‘The Montreal Protocol: How Today’s Successes Offer a Pathway to the Future’ (2015) 5(2) *Journal of Environmental Studies and Sciences* 122.

<sup>66</sup> See *Environment Protection (Impact of Proposals) Act 1974* (Cth), ss 5, 8 (repealed).

stated that: '[t]his Government believes one can reconcile the environment and development. There can be a balance ...'<sup>67</sup> Given what was known about sustainability once the Brundtland Report was published, such an approach might, from then on, be argued to be tendentious, intended to imply the pursuit of sustainability without the political consequences of prescribing outcomes diverging significantly from 'business as usual'.

### 1.3.3 Environment Protection (Policy Tier Three)

Policy Tier Three reflects a general aspiration that the environment and human health should be 'protected', without specifying the degree of protection (and from what threat), although general regulatory requirements to conduct cost-benefit analysis (CBA) will often impose a constraint that any standard adopted be economically efficient. The primary Australian example of this approach is the *National Environment Protection Council Act 1994* (Cth) and corresponding State Acts. These Acts establish a National Environment Protection Council of Commonwealth and State ministers, empowered to make National Environment Protection Measures (NEPMs) that set standards concerning pollution, on the twin general rationale of providing 'equivalent protection' to residents in different states from the harmful effects of pollution while also avoiding the economic impacts of market fragmentation.<sup>68</sup> These standards could be set on a range of pollution-related matters at any level, subject only to a requirement that they be nationally consistent. However, the Act does require that standards be made having regard to the environmental, economic and social impacts, ie to a prescribed form of CBA, implying the need for a positive benefit-cost ratio without actually imposing that requirement.<sup>69</sup>

### 1.3.4 Economic Efficiency (Policy Tier Four)

Economic efficiency is the intended outcome of applying the principles of welfare economics, the branch of neoclassical economics that deals with the economic welfare of society. This approach is the subject of chapter two. Some approaches in this tier, such as 'Ecological Modernisation', pursue production efficiency, which involves using the minimum physical resources to achieve a given outcome, although not always at the lowest

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<sup>67</sup> Commonwealth, *Parliamentary Debates*, House of Representatives, 3 March 1997, 1699 (John Howard, Prime Minister, Ministerial Statement, 'Australia's Oceans Policy').

<sup>68</sup> *National Environment Protection Council Act 1994* (Cth) s 3. See also the original agreement to establish these standards, the Intergovernmental Agreement on the Environment (Council of Australian Governments, 'Intergovernmental Agreement on the Environment' (COAG 1992) sch 4, cl 1.

<sup>69</sup> *National Environment Protection Council Act 1994* (Cth) ss 15, 17.



direct cost.<sup>70</sup> Ecological Modernisation is thus essentially a variant of economic efficiency because it targets changes that would otherwise be achieved in an efficient economy (production efficiency is inherently efficient economically).

### *Safe Minimum Standards*

An augmented variant of economic efficiency is Ciriacy-Wantrup's 1952 concept of 'safe minimum standards' (SMS).<sup>71</sup> Applying an economic analysis, Ciriacy-Wantrup argued that price alone would not identify the physical constraints needed to avoid the possibility of immoderate social losses arising from resource depletion.<sup>72</sup> As a result, SMS posits biophysical standards based on economic arguments.

### *Green Growth*

Another approach that augments the economic-efficiency approach of welfare economics is 'green growth', sometimes described as 'green economy'. This approach recognises the importance of natural assets or 'natural capital' to economic welfare, bringing this expressly into economic approaches, but without the associated strong articulation of equity principles as occurs in sustainability frameworks (see below). Among OECD countries, this approach now has official recognition.<sup>73</sup>

## **1.3.5 Sustainability Paradigms (Policy Tier Five)**

The factor that separates sustainability paradigms from lower policy tiers is the application of sustainability constraints to economic efficiency, on the basis of protecting the interests of future generations through an express normative principle of IGE. This tier encompasses several conceptions of sustainability, distinguished by their different approach to the nature of the stocks or capital that must be transmitted to future generations. 'Weak Sustainability' (WS) (Tier 5.1) assumes that one kind of capital can be substituted for another (infinite substitutability) and so it has only one category of capital. Ecologically Sustainable Development (Tier 5.2) and 'Strong Sustainability' (SS) (Tier 5.3) predicate that

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<sup>70</sup> See for example Arthur PJ Mol and Gert Spaargaren, 'Ecological Modernisation Theory in Debate: A Review' (2000) 9(1) *Environmental Politics* 17.

<sup>71</sup> S V Ciriacy-Wantrup, *Resource Conservation: Economics and Policies* (University of California Press, 1952).

<sup>72</sup> This argument is explored in section 3.1.2.

<sup>73</sup> See Organisation for Economic Cooperation and Development, 'Declaration on Green Growth', Document C/MIN(2009)5/ADD1/FINAL of 25 June 2009 (OECD 2009); Organisation for Economic Cooperation and Development, *Towards Green Growth* (OECD 2011).

substitutability is much more limited because of the biophysical realities of producing ecosystem services; SS requires that 'natural capital', or in some variants 'critical natural capital' be maintained, while ESD, with origins in science as well as economics, requires the maintenance of biodiversity and ecological function.<sup>74</sup> Despite differences in origin, the outcomes are likely to be similar, as critical natural capital is essentially an economic version of ecological function. 'Steady state economy' approaches (Tier 5.4) are discussed in 3.1.3 but argue broadly that the economy must be constrained from further growth because humans have already consumed resources needed by future generations for their own quality of life.

### **1.3.6 Ecocentric Approaches (Policy Tier Six)**

Policies that are based on ecocentric values, which attribute inherent value to nature, belong on the sixth tier. According to Carter, no position is purely ecocentric because none denies that humans have the right to live and flourish.<sup>75</sup> He thus argues that all positions that reject the 'sole value assumption', that humans are the sole source of value, and concede some intrinsic or inherent value to the non-human world, can be regarded as ecocentric.<sup>76</sup> On this view any policy that attributes some intrinsic value to the environment and does not consider the environment purely in terms of its instrumental value can be regarded as ecocentric. An example would be some 'degrowth' approaches, which emphasise the need to reduce production and consumption in order to maintain environmental values.<sup>77</sup>

## **1.4 The Research Question: To What Extent is the Failure of ESD Policies Attributable to Policy Factors?**

The research question in this thesis is: To what extent was the failure of Australia's ESD policies due to policy rather than political factors? Put another way, why did Australia's ESD policies fail when ESD appears to be a well-adapted response to the problem of GEDD?

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<sup>74</sup> These concepts are discussed in chapter three.

<sup>75</sup> Neil Carter, *The Politics of the Environment: Ideas, Activism, Policy* (Cambridge University Press, 2<sup>nd</sup> ed, 2007) 36.

<sup>76</sup> Ibid 17, 36.

<sup>77</sup> See for example Federico Demaria et al, 'What Is Degrowth? From an Activist Slogan to a Social Movement' (2013) 22(2) *Environmental Values* 191.

Several more specific questions fall from this. First, is a concept of ESD required at all? Might GEDD be halted simply by maximising economic efficiency through the prescriptions of welfare economics? Chapter Two considers the extent to which economic efficiency alone will address GEDD. Second, if GEDD can only be halted by applying a sustainability concept such as ESD, what does that concept entail and is ESD well-adapted to the task? This question is discussed in chapter three. Third, if ESD is a well-adapted response, to what extent did the policies adopted in pursuit of ESD fail because they in turn were not well-adapted applications of the concept and its principles? This is the question addressed in the four case studies in chapters four to seven respectively. Finally, if the policies failed for avoidable reasons of policy design, what are the elements of a well-designed ESD policy framework? This question is addressed in the final chapter.

### 1.4.1 What is Policy Success and Failure?

At its highest and simplest, policy success here is consistent with the ends-means paradigm discussed above: an adopted *social goal* is a viable response to an identified social problem and is achieved as a result of implementing one or more policies designed with that goal in mind. There are however more factors to success than outcomes. Marsh and McConnell have developed a framework for measuring policy success, constructed around three dimensions of process, indicated by factors such as due process and sufficiency of support; programmatic success, determined by factors including achievement of intended outcomes and resource-use efficiency; and political success, measured by improvements to government popularity and credibility.<sup>78</sup> McConnell has also written on policy failure.<sup>79</sup> This thesis is broadly consistent with Marsh's and McConnell's approach, without attempting to apply their success framework specifically. This is primarily because political success is largely out of scope here, but also because the thesis approaches ESD policies more in terms of identifying conceptual reasons for policy failure than evaluating policy success in its broadest sense. In that regard, policy failure is taken here in McConnell's primary sense of 'not fundamentally achiev[ing] the goals that proponents set out to achieve'.<sup>80</sup> Interestingly, although this test might be thought to imply a focus on policy content, the

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<sup>78</sup> In Marsh and McConnell's framework for establishing policy success, this is success in terms of achieving 'programmatic outcomes': see David Marsh and Allan McConnell, 'Towards a Framework for Establishing Policy Success' (2010) 88(2) *Public Administration* 564, 571 (Table 1), 573.

<sup>79</sup> Allan McConnell, 'What Is Policy Failure? A Primer to Help Navigate the Maze' (2015) 30(3–4) *Public Policy and Administration* 221.

<sup>80</sup> *Ibid* 230.

thesis does find that failure to build sufficient support for the policy, by well-adapted means, has been a significant factor in the failure of ESD policies.<sup>81</sup>

In light of this focus on policy failure and because the thesis is directed to whether ESD policies were well-adapted, irrespective of whether they were actually successful, the research question is interpreted not as 'did the policy fail to achieve its goals' but as 'did the policy fail to achieve its goals because the goal was not a viable response to the problem and the policies not well-adapted to achieving the goal?'

#### **1.4.2 The Gap in the Literature and Contribution to Knowledge**

Internationally, SD is the subject of an extensive literature. Relevant aspects of that literature, which provides significant context for ESD, are discussed in chapter three. The gap in the literature addressed in this thesis concerns the failure of ESD as a general policy approach. Most of the Australian sustainability literature has either contributed to the international literature from an Australian perspective rather than addressing ESD specifically, or has discussed ESD in the broader context of Australian policy approaches, rather than focusing on ESD per se. The contribution of Dovers, the pre-eminent Australian sustainability scholar exemplifies this, with most of his work addressing, respectively, sustainability policy processes and institutions; specific sustainability issues such as information and precaution; and Australian policy approaches more generally (including historically).<sup>82</sup> There is however some literature specific to ESD per se, which is considered in the relevant chapters: Dovers has reviewed the National Strategy on ESD; Macintosh has reviewed the ESD principles and also considered their application, especially in the context of environmental impact assessment; while several scholars including Pittock and Curran have considered the institutionalisation of ESD, including in comparison to other strategic policy approaches.<sup>83</sup> The legal literature has focused on the

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<sup>81</sup> See also the discussion of the elements of environmental policy success in Kate Crowley and KJ Walker, 'Introduction' in Kate Crowley and KJ Walker (eds), *Environmental Policy Failure: The Australian Story* (Tilde University Press, 2012), 7–8.

<sup>82</sup> See for example Dovers and Hussey, above n 42; Robin Connor and Stephen Dovers, *Institutional Change for Sustainable Development* (Edward Elgar, 2004); Stephen Dovers, 'Information, Sustainability and Policy' (1995) 2 *Australian Journal of Environmental Management* 142; Stephen R Dovers and John W Handmer, 'Ignorance, the Precautionary Principle, and Sustainability' (1995) 24(2) *Ambio* 92; Stephen Dovers, 'The Australian Environmental Policy Agenda' (2013) 72(2) *Australian Journal of Public Administration* 114.

<sup>83</sup> See for example Stephen R Dovers, 'The Rise and Fall of the NSESD, or Not?' (1999) (4) *Australian Environmental Law News* 30 [Paper Presented at the National Environmental Law Association Conference (18<sup>th</sup>, 1999, Sydney)]; Andrew Macintosh, 'The Impact of ESD on Australia's Environmental Institutions' (2015) 22(1) *Australasian Journal of Environmental Management* 33; Andrew Macintosh, 'Ecologically Sustainable Development (ESD) and the Cost-Effectiveness Principle' (2016) 30(9–10) *Australian Environment Review*;

giving of legal and institutional form to ESD through intergovernmental agreements and legislation, and the interpretation of ESD in a legal context. Stein, for example, has written about the incorporation of sustainability principles into legislation while Fisher has considered the meaning, implementation and enforcement of ESD more generally.<sup>84</sup> Ecologically Sustainable Development has also been considered judicially (see chapter seven). Aside from there being a gap in the literature, recently available government documents provide a rich source of new evidence.

The thesis includes four case studies, argued to represent policy failure on the topics of environmental information, national ESD strategies, biodiversity policy and environmental impact assessment under the *EPBC Act*. While these topics have all been the subject of previous literature, and while Walker and Crowley have both edited several collections with a theme of policy failure,<sup>85</sup> the case studies nevertheless contribute to knowledge by examining ESD policies in greater depth than previous work and by drawing extensively on previously unavailable documentary sources (see 1.7). The thesis also contributes to knowledge by combining the empirical research of ESD-focused case studies with the theoretical and empirical analysis of the ESD concept in a single work and by positioning ESD relative to broader themes in several decades of international literature.

## 1.5 Scope of Thesis, Assumptions, Definitions and Terminology

Before discussing the research method, it is appropriate to deal with preliminary matters of a more technical nature.

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Giorel Curran and Robyn Hollander, 'Changing Policy Mindsets: ESD and NCP Compared' (2002) 9(3) *Australian Journal of Environmental Management* 158; Giorel Curran and Robyn Hollander, '25 Years of Ecologically Sustainable Development in Australia: Paradigm Shift or Business as Usual?' (2015) 22(1) *Australasian Journal of Environmental Management* 2.

<sup>84</sup> Paul Stein and Susan Mahony, 'Incorporating Sustainability Principles in Legislation' in *Environmental Outlook No 3: Law and Policy* (Federation Press, 1999); D E Fisher, 'Sustainability — the Principle, Its Implementation and Its Enforcement' (2001) 18 *Environmental Planning and Law Journal* 361.

<sup>85</sup> See K Walker (ed), *Australian Environmental Policy: Ten Case Studies* (New South Wales University Press, 1992); Walker, KJ and K Crowley (eds), *Australian Environmental Policy 2: Studies in Decline + Devolution* (UNSW Press, 1999); Kate Crowley and KJ Walker (eds), *Environmental Policy Failure: The Australian Story* (Tilde University Press, 2012).

### 1.5.1 Thesis Confined to Ecologically Sustainable Development in Australia's Domestic Context Including System of Government

The thesis is concerned with ESD; it discusses other major sustainability paradigms only for comparative purposes. The review of the sustainability literature in this regard is therefore not comprehensive. Lafferty and Langhelle describe two dimensions of Sustainable Development, the time dimension (intergenerational equity, IGE) and the space dimension (intragenerational equity).<sup>86</sup> Although ESD retains a formal commitment to intragenerational equity, this dimension plays only a minor part, because intragenerational equity is concerned predominantly with an equitable sharing of the Earth's resources between nations, while ESD is domestically focused.<sup>87</sup> Ecologically Sustainable Development can be thus regarded for most purposes as concerned with the time dimension, or what Brundtland described as 'physical sustainability'.<sup>88</sup>

#### *Ecologically Sustainable Development Taken to be the Policy Goal*

The thesis takes ESD as a national social goal because Australian governments, federal and State, have committed to ESD on several occasions and acted on that commitment through a significant number of initiatives. It is thus beyond scope to consider whether other normative principles might be more appropriate responses to GEDD. As the commitments to ESD are mostly over 25 years old, good arguments can be made that they have lost their normative force. Certainly, government commitment to ESD programs began to fade almost as soon as the policies were adopted and the central coordinating mechanism for ESD, the Intergovernmental Committee on ESD, weak as it was, was abolished in 1998, as discussed in chapter three. However, the commitments were fresh when governments first adopted the policies studied here and those commitments mostly remain 'on the books', especially in a wide range of federal and State legislation, but also in policy statements and in discourse. Notionally at least, Australia remains committed to ESD.

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<sup>86</sup> William W Lafferty and Oluf Langhelle, 'Sustainable Development as Concept and Norm' in William W Lafferty and Oluf Langhelle (eds), *Towards Sustainable Development: On the Goals of Development — and the Conditions of Sustainability* (Macmillan Press, 1999), 7.

<sup>87</sup> The application of intragenerational equity domestically under ESD is limited to certain specific issues such as structural adjustment payments to people who lose income as a result of sustainability policies.

<sup>88</sup> See WCED, above n 7, 43; Lafferty and Langhelle also use this term, linking it to nature's carrying capacity: see Lafferty and Langhelle, above n 86, 16.

*Australia, a Federated Liberal Democracy with Market Economy and Dominant Neoliberal Paradigm*

As Australia is a liberal democracy with a market economy, the thesis assumes these attributes as context for policy. Australia also has a federal system. Ecologically Sustainable Development was developed in this federal context and so this also forms part of the general context for discussion. However, for practical reasons, the scope of the thesis is confined to Commonwealth (ie Federal Government) policy, even where the policies examined were also adopted by States and Territories (collectively, 'States'). A further reason for this limitation of scope is that the States were reluctant participants in ESD processes (see chapter five), leaving the Commonwealth as the most committed jurisdiction and therefore the best subject of analysis.

The thesis also discusses policy against a backdrop of assuming that Australia's 'dominant social paradigm' — the set of values, beliefs and institutions through which the dominant groups in society interpret the social world — is that of a politically liberal and technologically optimistic society, with a general policy orientation to economic growth.<sup>89</sup> From at least 1983, ie during most of the period traversed by this thesis, one could go further and take the dominant social paradigm in Australia to be neoliberal, in the sense of seeking to maximise economic growth by pursuing policies that are deregulatory, liberalising of trade and industry, and oriented to privatising state-owned enterprises,<sup>90</sup> although Australian policy is by no means uniformly neoliberal.<sup>91</sup> Even though arguments have been made that, after the Global Financial Crisis, neoliberalism is no longer as dominant as it was in the 1990s,<sup>92</sup> Australian policy remains broadly market-oriented.

*Relevance of Non-Renewable Resources*

Although the problem of GEDD extends to the degradation and depletion of all resources, renewable and non-renewable, the focus is on renewable resources, as the

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<sup>89</sup> Pirages and Ehrlich developed the concept of the dominant social paradigm: see Dennis Pirages and Paul R Ehrlich, *Ark II: Social Response to Environmental Imperatives* (W H Freeman, 1973). Kilbourne's model of the dominant social paradigm, applied here, consists of three subsets of political, economic and technological attitudes respectively: see William E Kilbourne, 'The Role of the Dominant Social Paradigm in the Quality of Life/Environmental Interface' (2006) 1(1) *Applied Research in Quality of Life* 39, 41–45.

<sup>90</sup> See Manfred B Steger and Ravi K Roy, *Neoliberalism: A Very Short Introduction* (Oxford University Press, 2010) 14. Neoliberalism is sometimes described as 'economic rationalism' in Australia, although this nomenclature is waning.

<sup>91</sup> See Alan Fenna, 'The economic context of policy analysis in Australia' in Brian Head and Kate Crowley, *Policy Analysis in Australia* (Policy Press, 2015) 46.

<sup>92</sup> Steger and Roy, above n 90, 137.

predominant manifestation of GEDD is a degrading of the capacity of renewable resources to maintain previous rates of renewal, placing ecosystems and some biogeochemical processes onto a trajectory of decline. For this reason, the increasing scarcity of non-renewable resources such as ores to serve as production inputs, is not addressed here, as this is a qualitatively different problem.

### 1.5.2 Concepts, Definitions and Terminology

The term GEDD is discussed in 1.1, but several other concepts and terms are explained here.

#### *ESD as Goal vs Policy Pathway*

Several scholars have pointed out that SD is often used to describe both the goal and the potential of achieving it. Pezzey points out that the achievement of the goal is really 'sustainedness',<sup>93</sup> while Dovers and Handmer use 'sustainability' to describe the 'system property' when SD has been achieved and 'sustainable development' to describe the policy activity or pathway of deliberate change that enhances this property.<sup>94</sup> So too here with ESD, with that term generally referring to the policy activity or pathway to 'ecological sustainability', the system property of having achieved ESD. However, the thesis also uses the terms 'SD' and 'ESD' generally, where it is not necessary to distinguish between goal and policy pathway, or where the context makes it clear that the term is used in one or the other sense.

#### *Economic Terminology Applied to Nature*

Economic terminology has become prominent in environmental policy. Natural features are sometimes described as 'natural assets', 'natural capital' or as 'stocks' (as distinct from 'flows') There is some debate in the literature as to whether 'natural capital' is a metaphor or a class of capital.<sup>95</sup> Because that debate is not relevant here, the thesis uses these terms interchangeably.

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<sup>93</sup> John Pezzey, 'Sustainability: An Interdisciplinary Guide' (1992) 1(4) *Environmental Values* 321, 323.

<sup>94</sup> See Stephen R Dovers and John W Handmer, 'Uncertainty, Sustainability and Change' (1992) 2(4) *Global Environmental Change* 262, 275; Dovers, Stephen R, 'Sustainability: Demands on Policy', above n 29, 304.

<sup>95</sup> Compare Peter A Victor, 'Indicators of Sustainable Development: Some Lessons from Capital Theory' (1991) 4 *Ecological Economics* 191 and Salah El Serafy, 'The Environment as Capital' in Robert Costanza (ed), *Ecological Economics: The Science and Management of Sustainability* (Columbia University Press, 1991) 168.



The thesis also uses the economics-oriented terminology of ‘environmental resources’ and ‘environmental goods and services’, and does so interchangeably, unless the context makes it necessary to distinguish between goods and services. While the terminology of ‘ecosystem services’, which describes ecological functions in terms of their economic function, such as ‘air purification’ as the capacity of the atmosphere to break down pollutants,<sup>96</sup> has become common if not dominant in environmental policy discourse, entering the official policy mainstream in 2012 through adoption of the SEEA as an International Statistical Standard,<sup>97</sup> these more general economic terms are sufficient here.

### *Ministerial and Departmental Titles, Ministerial Councils*

The Commonwealth minister and department responsible for environmental matters have borne a range of titles since the Commonwealth first used that term in a departmental title in 1971. A full list of the ministers and departments with primary responsibility for the environment is at Appendix 1.1. For ease of reference, this thesis uses the terms ‘Environment Minister’ and ‘Environment Department’ to refer to the minister and department of the day.

Australia has a federal system under which responsibilities for the environment are shared between the Commonwealth and State governments. Between 1971 and 2013, Commonwealth and State environment ministers met as a ministerial council under various titles (initially Australian Environment Council) to discuss various aspects of cooperation on and coordination of environmental matters. During some periods there were several environment-related councils, while since 2013 there has been no ‘council’ as such but ministers have continued to meet under the prosaic title ‘Meeting of Environment Ministers’. For ease of reference, the thesis uses the general term ‘Environment Ministerial Council’ unless referring to a specific council.

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<sup>96</sup> Gretchen C Daily, ‘Introduction: What Are Ecosystem Services?’ in *Nature’s Services: Societal Dependence on Natural Ecosystems* (Island Press, 1997) 3–4, 7–8.

<sup>97</sup> United Nations et al, *System of Environmental-Economic Accounting 2012 — Central Framework* (UN 2014) (‘SEEA Central Framework’). The SEEA is discussed further in chapter five. The terminology has also been used in official publications in Australia: see Department of the Environment, Water, Heritage and the Arts, *Ecosystem Services: Key Concepts and Applications*, Occasional Paper Series No 1 (DEWHA 2009).

## *Generations*

With intergenerational equity a central concept in the thesis, it is important to consider the term 'generation'. A generation is often taken in the sense of 'the average time in which children are ready to take the place of their parents (usually reckoned at about 30 years)'.<sup>98</sup> Here, generations are mostly discussed in the relative sense of contrasting the position of living (adults), who can influence policy through their participation or representation in democratic processes, with the position of those as yet unborn, who cannot so participate and are not represented. Note however that the discussion of the limitations of time discounting in chapter two reaches conclusions that relate the time horizon of discounting to generations in the former and more conventional sense.

## **1.6 Research Methodology: Historical Documentary Analysis**

The research question concerns the integrity and viability of ESD as a concept, in part by reference to theoretical considerations and in part by reference to governmental deliberation and action. The latter raises the following questions for this research: did government (in this context, ministers, officials or both) understand the nature of ESD; did they understand what implementing a goal of ESD would require; and if they did understand these things, did they act consistently with their understanding? If all three questions are answered in the affirmative and if ESD is the coherent concept that the thesis argues it to be, any policy failure must have been due to 'conventional' factors such as under-funding or inadequate administration. On the other hand, if, as the thesis will argue, some of these questions must be answered in the negative, the task is to identify how and why government failed to understand and implement ESD.

### **1.6.1 Why This Method?**

The research seeks to test this hypothesis of government failure, first by reference to the thinking of officials, as revealed in high-level deliberative documents and formal advice to governments, and second by reference to the understanding and intent of ministers, as

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<sup>98</sup> Bruce Moore (ed) *Australian Oxford Dictionary* (Oxford University Press, 2<sup>nd</sup> ed, 2005), fourth definition of 'generation'.

revealed in their cabinet submissions and official written policy statements.<sup>99</sup> In the Australian system, cabinet submissions are drafted by officials but sponsored by ministers under their own name and responsibility for content, while cabinet memoranda are the work of officials alone.<sup>100</sup> In both cases, the documents contain ‘coordination comments’ from departments other than those preparing them.<sup>101</sup> These documents therefore set out views from a range of officials, and in the case of submissions also reflect the views of the sponsoring minister. Individual ministerial policy views are otherwise on the public record only when canvassed occasionally in memoirs.<sup>102</sup> Collective views adopted by ministers in Cabinet (ie the official views of Government) are revealed in policy statements.<sup>103</sup>

The writer selected documentary analysis as the research method on the basis that high-level deliberative documents and policy statements were the richest source of evidence on policy thinking. While analysis of these documents might have been supplemented by interviews, allowing, in Bowen’s terms, a ‘triangulation’ with inferences drawn from the documents,<sup>104</sup> the writer opted to maximise the breadth of analysis, on the basis that this approach was most likely to reveal new evidence. This was primarily because the relevant events occurred over 25 years ago and the information sought concerned the detail of complex policy thinking, possibly difficult to recall.

### 1.6.2 Access to Australian Government Records

The writer obtained ‘special access’ to environment department records under the *Archives Act 1983* (Cth).<sup>105</sup> This Act enables an authorised decision-maker in the relevant department to grant access in certain cases to records that are not yet publicly available because they do not yet fall within the ‘open access period’ under the *Archives Act 1983* (Cth), defined at the time of writing as applying to documents created before 1996.<sup>106</sup> The

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<sup>99</sup> Pursuant to the *Archives Act 1993* (Cth), most records of the Commonwealth Government, including Cabinet submissions and memoranda, were, in 2018, publicly available if generated in or before 1995.

<sup>100</sup> Australian Government, ‘Cabinet Handbook’ (10<sup>th</sup> Edition Department of the Prime Minister and Cabinet, 2017) 19–20.

<sup>101</sup> Ibid 20.

<sup>102</sup> Individual ministerial views may be recorded in Cabinet notebooks but most of the notebooks relevant to this thesis are not yet released: under s 22A of the *Archives Act 1983* (Cth), Cabinet notebooks, which often record the views of individual ministers, prepared in 1983 or earlier were publicly available in 2018.

<sup>103</sup> Of course, individual Cabinet ministers might have opposed a proposed policy statement, or might endorse a collective view with reservations or reluctance, but for present purposes the principle of Cabinet solidarity can be applied to justify the conclusion that any document endorsed by Cabinet reflected the thinking of the Government.

<sup>104</sup> See Glenn A Bowen, ‘Document Analysis as a Qualitative Research Method’ (2009) 9(2) *Qualitative Research Journal* 27.

<sup>105</sup> See section 56, together with *Archives Regulations* (Cth), reg 9.

<sup>106</sup> See *Archives Act 1983*, ss 3, 31.

relevant ground on which the writer, a former senior executive of the environment department, was granted access was that:

- (ii) ... the work is likely to make a substantial contribution to the recording and assessment of events in the political, social, economic, cultural, scientific or other development of Australia, particularly as that development relates to the administration or affairs of the Government of the Commonwealth.<sup>107</sup>

The writer's perspective as a former senior official was that successive governments appeared to have moved away progressively from ESD, without formal deliberation, despite the apparent coherence of the concept and the worsening nature of the problems to which it responded. In the apparent absence of viable alternatives, a comprehensive analysis of ESD and the reasons why successive governments had moved away from it, might make a useful contribution to future policy development. Access was granted to documents created prior to September 2013, a time selected to exclude records of the current government.

#### *Record Searches*

This section describes the approach used by the writer to search records made available under 'special access'.

The Environment Department operates a records database, which can be interrogated by the file name or the name of the work unit.<sup>108</sup> File names may include one or more of the following: a topic, a work unit, a government program title, or an activity such as the organisation of a conference. Searches can be restricted to a range of dates. The search method was that the writer provided the department with lists of search terms; the department then provided the writer with lists of files with titles containing those terms and the writer then selected files to review; he then identified documents relevant to the research by viewing the file contents. This was the most thorough way to identify relevant records, short of examining all files created in relevant periods, an impossibly large task.

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<sup>107</sup> Reg 9(2)(d).

<sup>108</sup> Almost all records during the period covered by the research were held on (physical) files. Towards the end of that period the environment department began transitioning to a records system that is mostly based on electronic files.

Because the database search parameters are designed to assist management rather than research, the level of assurance that well-directed searches would reveal all relevant documents was not as high as would apply to a search of library records. Further, the writer found that the standard of record-keeping varied, even though that standard was, overall, high. As a result of these factors, there were a few documents which the writer was unable to locate, such as final ministerial advice when the file contained only a final draft. Overall however, the writer's assessment is that the search method revealed the vast majority of relevant records.<sup>109</sup> These comments also apply to publicly accessible records held in the National Archives, which, like those of the environment portfolio, are organised by agency, file series and file name, rather than by subject per se.

## 1.7 Argument and Overview of the Thesis

The argument of the thesis is that the concept of ESD is a viable response to the problem of GEDD, feasible of achievement, but that the policy means chosen to achieve ESD were unsuccessful because they were not well-adapted to achieving it. Official documents suggest that officials and ministers had at least an incomplete understanding of what ESD meant and required; it is also possible that they ignored rather than misunderstood aspects of the concept, although there is no direct evidence of this. The remaining chapters of the thesis are outlined below.

### *Chapter Two: The Limits of Mainstream Policy Approaches To The Problem Of General Environmental Depletion And Degradation*

Recognising the relative novelty and complexity of ESD, chapter two explores whether a concept such as ESD is even required: could GEDD be addressed by mainstream policy approaches, primarily the prescriptions of welfare economics, the 'mother tongue' of public policy, but supplemented by regulation where markets fail?<sup>110</sup> The chapter finds that such a regime would not overcome GEDD for reasons relating to the attributes of the environment and the market, as well as to attributes of welfare economics. Environmental attributes such as the systemic nature of biodiversity, along with other practical matters

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<sup>109</sup> While the Commonwealth archival regime generally requires that records be preserved, it does provide the destruction of some routine records (eg travel documentation) after retention periods and there were a few instances in which a file identified in a search was recorded as having been destroyed. However, in the writer's opinion none of these files was likely to have contained any documents significant to this research.

<sup>110</sup> Kate Raworth, *Doughnut Economics* (Chelsea Green Publishing, 2017) 4.

such as jurisdictional limits often make it difficult to bring environmental resources into markets. Other environmental attributes such as thresholds and irreversibility can make it difficult for prices to fulfil their role as the coordinating mechanism of markets, leading to market failure. Even where governments might in principle correct market failures relating to the environment by, for example, internalising environmental externalities, the fact that welfare economics relies on the preferences of current generations limits the effectiveness of the price mechanism as a means of allocating environmental resources between present and future consumption. The long-term nature of GEDD makes it essential that the interests of future generations be fully reflected in policy. This will require a normative principle concerning the interests of future generations, outside of economics.

### *Chapter Three: Origins, Meaning and Viability of ESD as the Goal of Environmental Policy In Australia*

With the need established for sustainability constraints in addressing GEDD, this chapter first examines the antecedents and development of ESD, from early concepts such as SMS in the 1950s through to the Brundtland definition of SD and the development of ESD by the Australian government over the period 1989–1992. It then considers the meaning of ESD, arguing that the concept can be summarised as ‘maximising economic welfare within the constraints of maintaining ecological function’. The chapter considers the various ESD policy principles and identifies a limited set that, while essential to ESD, are not a substitute for the concept itself.

### *Chapter Four: Environmental Information and ESD*

This chapter is the first of four case studies in the thesis. Policy concerning environmental information and ESD is a useful case study not only because environmental information is fundamental to environmental policy but also because establishing an ESD-appropriate information framework should represent the ‘easy case’, a relatively low-cost and politically uncontroversial measure. It argues that despite significant effort over an extended period, and despite the availability of several well-adapted information frameworks, Australian policy on environmental information is characterised by failures to establish and maintain comprehensive information systems and to apply available frameworks in support of ESD, and failures to integrate the efforts of various agencies and levels of government. As a result, despite significant and extended activity, Australia suffers a fundamental lack of

capacity to inform ESD in a comprehensive manner and is unable to measure progress towards that goal.

#### *Chapter Five: The National Strategy on Ecologically Sustainable Development*

This chapter evaluates the ‘flagship’ program for implementing ESD, the *National Strategy on Ecologically Sustainable Development* (NSED). Despite being comprehensive in both scope and stakeholder engagement, the strategy suffered from vagueness, weak institutionalisation and gross under-investment and was a policy failure. The chapter argues that ultimate reasons for this failure arose from precipitate initial decisions by government about the major project it was initiating; mixed messages from government to stakeholders about policy objectives; a failure to capitalise on limited yet useful progress made under the ‘ESD Process’; and the late abandonment of this process and associated lowering of policy aspiration. This resulted in a hollowing-out of policy recommendations and adoption of a policy that was more facade than substance.

#### *Chapter Six: The National Biodiversity Strategy and ESD*

This third case study traces successive versions of Australia's National Biodiversity Strategy (Biodiversity Strategy) from the original policy commitment in 1989 through two substantive strategies to the present new draft. Originally conceived of as a significant component of ESD policy, this chapter finds that momentum was lost in developing the original strategy, as public concern and thus policy ambition, waned. As a result, successive versions of the strategy have, like the NSED, suffered from major weaknesses including underdeveloped measures, poor institutionalisation and gross federal coordination. Despite this, the Biodiversity Strategy survives because its policy objective has changed. What was once intended to drive biodiversity conservation as a major component of domestic ESD policy now serves the far more limited function of maintaining Australia’s ‘good standing’ under the *Convention on Biological Diversity* (Biodiversity Convention) by meeting a requirement that each party should have a national strategy.<sup>111</sup>

#### *Chapter Seven: Applying Ecologically Sustainable Development Through Environmental Impact Assessment Under the Environment Protection and Biodiversity Conservation Act 1999*

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<sup>111</sup> *Convention on Biological Diversity*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993).

The case study in this chapter considers the environmental impact assessment (EIA) scheme of the EPBC Act as a vehicle for promoting ESD. Including by reference to legislative history, the analysis finds that the Act incorporated, in weak form, both viable models for promoting sustainability goals through EIA, one based on providing a planning context for the approval of assessed development projects and the other providing for a set of ESD-based decision rules. As a result of weak institutionalisation and implementation, the Act does not give substantial effect to either model, and defaults to a 'mandatory considerations' approach, under which decision-makers are required to do no more than have regard to ESD principles.

#### *Chapter Eight: Successes, Failures, Prospects*

The concluding chapter reviews the argument of the thesis and discusses the underlying reasons for policy failure before making recommendations for a revised approach to ESD. The thesis concludes that ESD remains a coherent and viable concept. To the extent that they arise from policy and not politics, the failure of ESD policies arises from a lack of understanding of the concept, together with a failure to secure broad social support for ESD by matching the 'Grand Policy' nature of ESD with a corresponding 'Grand Policy process'. Given that these failures relate to the policy process and not to the concept itself, ESD remains in prospect when and if society recommits to solving the social problems arising from GEDD.



## CHAPTER TWO

### THE LIMITS OF MAINSTREAM POLICY APPROACHES TO THE PROBLEM OF GENERAL ENVIRONMENTAL DEPLETION AND DEGRADATION

*Economics is the mother tongue of public policy, the language of public life and the mindset that shapes society.*

Kate Raworth<sup>112</sup>

This chapter considers whether GEDD could be resolved by applying mainstream public policy approaches, without introducing sustainability concepts. The principle of parsimony suggests that the simplest solutions are to be preferred: the fewer the opportunities to make false assumptions or select an incorrect value for a variable, the more likely the theory is to be robust.<sup>113</sup> Mainstream approaches also have the obvious practical advantages, not only of being well-known and understood, but also of having elite support.

At its broadest, the problem of GEDD can be seen as one of society's demand for environmental resources exceeding supply, an economic problem.<sup>114</sup> On its face therefore, the problem lends itself to an economic solution. The mainstream economic approach at a

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<sup>112</sup> Raworth, above n 109, 4.

<sup>113</sup> The principle of parsimony is a variant of 'Ockham's Razor', (also known as *lex parsimoniae*) after William of Ockham, a 13<sup>th</sup> century monk. Note however that there is also a risk of oversimplification: the saying 'everything should be made as simple as possible, but not simpler' has been attributed to Einstein. The proposition that economic solutions to GEDD should be considered before turning to sustainability principles should not be confused with the 'Environmental Kuznets Curve Hypothesis', an argument made by some scholars, on the basis of a correlation between increasing wealth and improving environmental quality, that society is likely to solve environmental problems as it becomes wealthier. Leaving aside the strong criticisms made of this hypothesis (see for example David I Stern, 'The Rise and Fall of the Environmental Kuznets Curve' (2004) 32(8) *World Development* 1419), the argument of the hypothesis is not that efficient markets will automatically address environmental problems, but that societies will address environmental problems as they become wealthier. The type of policy responses adopted by society under this hypothesis might take any effective form, from improving market efficiency to traditional regulation.

<sup>114</sup> Ayres makes a similar argument: 'It is not too much of an exaggeration to say that most environmental problems are attributable to materials consumption and disposal.' (Robert U Ayres, 'Sustainability economics: Where do we stand?' (2008) 67 *Ecological Economics* 281, 287.) This of course is not to deny that environmental problems are not, equally, scientific and social problems.

social scale is to apply the prescriptions of welfare (normative) economics,<sup>115</sup> the branch of mainstream economics concerned with assessing the impact of economic activity on 'social welfare', the level of well-being in society.<sup>116</sup> According to welfare economics, social welfare or well-being is maximised by maximising the present value of real consumption per capita.<sup>117</sup> As the theorems of welfare economics identify complete and competitive markets as the pathway to maximising social welfare, welfare economics tends to point to policy approaches based on enhancing the operation of markets.<sup>118</sup> This implies a twofold approach to policy: first, to provide the necessary general conditions for the efficient operation of markets, for example through a well-developed law of private property; and secondly for government policy interventions to be directed to correcting specific market failures.<sup>119</sup> Formal Australian government policy has been broadly aligned with this approach in recent decades, as seen in successive versions of its regulation handbook.<sup>120</sup>

The chapter argues that welfare-economic approaches would remedy or mitigate many environmental problems, bringing supply and demand for environmental resources into equilibrium to a much greater degree than at present, but that two sets of problems prevent markets from offering a complete solution to GEDD. First, a number of practical problems, arising from the biophysical nature of the environment and limitations of jurisdiction, inhibit or prevent the full allocation of property rights and supply of complete information that would be necessary for a system of complete and perfectly competitive markets, and similarly affect policy interventions designed to remedy market failures. Second, GEDD is inherently an intergenerational problem. Welfare economics is guided by, and markets operate according to, the preferences of the current generation, addressing the interests of future generations only indirectly, a phenomenon described by Page as

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<sup>115</sup> See Kevin B Smith, 'Economic Techniques' in Michael Moran, Martin Rein and Robert E Goodin (eds), *The Oxford Handbook of Public Policy* (Oxford University Press 2006) 729. Welfare economics is also known as normative economics because it is the economics of policy recommendations: see Daniel M Hausman and Michael S McPherson, 'The Philosophical Foundations of Mainstream Normative Economics' in Daniel M Hausman (ed), *The Philosophy of Economics: An Anthology* (Cambridge University Press, 2008) 205, 228, 234.

<sup>116</sup> 730; see John Black, John Hashimzade and Gareth Myles, *A Dictionary of Economics* (Oxford University Press, 5th ed, 2017), definitions of 'welfare' and 'social welfare function'. Welfare economics is built on a theory of rationality which is not challenged here; for an example of a work that does challenge that theory, see Mark Sagoff, *The Economy of the Earth: Philosophy, Law, and the Environment* (Cambridge University Press, 2nd ed, 2008).

<sup>117</sup> See for example D W Pearce, G D Atkinson and W R Dubourg, 'The Economics of Sustainable Development', (1994) 19 *Annual Review of Energy and Environment* 457, 459–460.

<sup>118</sup> See Smith, 'Economic Techniques', above n 115, 731.

<sup>119</sup> For a more detailed description of the theorems of welfare economics and the correction of market failures, see text books such as Peter Abelson, *Public Economics: Principles and Practice* (McGraw-Hill, 3<sup>rd</sup> ed, 2012) 50; and Joseph E Stiglitz and Jay K Rosengard, *Economics of the Public Sector* (W W Norton, 4<sup>th</sup> ed, 2015).

<sup>120</sup> Australian Government, 'Best Practice Regulation Handbook' (Office of Best Practice Regulation, 2007); Department of Prime Minister and Cabinet, *The Australian Government Guide to Regulation* (PM&C 2014).

‘selfish altruism’.<sup>121</sup> As a result, neither a complete set of competitive and fully-informed markets nor a set of policy interventions based exclusively on the canons of mainstream economics would address the intergenerational aspects of GEDD adequately; the increasing impacts of GEDD would be delayed, but not halted and reversed. The benefits of markets would need to be complemented by policies based on a normative intergenerational principle.

## **2.1 Potential Environmental Gains Through Efficient Markets and Limits to these Gains**

The benefit of markets in the current context is that captured in Adam Smith’s ‘invisible hand’ metaphor, that the aggregate of the self-interested transactions individuals in the market will, without policy intervention (‘as if by an invisible hand’) bring supply and demand for goods and services into equilibrium.<sup>122</sup> This self-regulating effect influences the actions of both suppliers and consumers. If goods become scarce, their prices will rise, simultaneously providing suppliers with an incentive to increase supply or offer a substitute and consumers with an incentive to make a substitution or consume less. Further, private property owners have an incentive to maintain the productive capacity of their assets, as over-exploitation will reduce both future returns and present market values. In principle, these characteristics of markets are as applicable to environmental resources as to any others: market forces should operate to equilibrate demand and supply for environmental resources and stimulate actions to maintain the productive capacity of environmental assets.

For markets to achieve efficiency they must be complete and fully competitive, and buyers and sellers must be fully informed. The absence of these characteristics leads to market failure. While described in different ways, environmentally-relevant market failures, which are pervasive, are due principally to incomplete property rights and information failures.<sup>123</sup>

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<sup>121</sup> Talbot Page, *Conservation and Economic Efficiency: An Approach to Materials Policy* (Johns Hopkins University Press, 1977) 13, 159.

<sup>122</sup> Adam Smith, *The Wealth Of Nations*, Book IV, Chapter II, (Penguin, first published 1776, 1999 ed) vol 2, 32.

<sup>123</sup> The four commonly recognised market failures are (under-supply of) public goods, externalities, information asymmetries and natural monopolies (see for example David Leo Weimer and Aidan R Vining, *Policy Analysis: Concepts and Practice* (Prentice Hall, 2nd ed, 1992) 74), although public goods and externalities can both be regarded as manifestations of the problem of incomplete assignment of property rights.

### 2.1.1 Assignment of Property Rights, or Achieving Equivalent Outcomes

In principle the full assignment of property rights would eliminate the negative externalities that cause environmental resources to be consumed at less than their full social cost, as any person considering an action with adverse environmental impacts would have to negotiate with all relevant rights-holders, who in turn would have an incentive to use the affected assets efficiently. In the classic example of a factory causing a local smoke-nuisance, the factory owner would have to negotiate with the property owners whose health and amenity was affected by the smoke and the owners of the local air catchment (who may be one and the same).

As Coase has pointed out, from an economic perspective, the proper basis for negotiation is not the vindication of rights but the maximisation of value.<sup>124</sup> The critical point here however is not Coase's theoretical insight into the reciprocal nature of externalities and its implication that optimum policy approach is not to eliminate smoke pollution but to secure the economically optimum amount of smoke pollution.<sup>125</sup> Rather, it is the spotlight that Coase's analysis casts on the significance of transaction costs. In the real world, transaction costs will be a major if not overwhelming obstacle to resolving environmental externalities by private negotiation in all but the most local of cases. This does not mean that the full assignment of property rights is not an attractive theoretical approach, but it does mean that, except in localised instances, a bare assignment of property rights is unlikely to be feasible and that environmental market failure will have to be addressed by a more complex government intervention designed to mimic the outcomes of a bare assignment. Coase acknowledges this, while pointing out that the intervention must be an appropriate one.<sup>126</sup>

Examples of government interventions designed to mimic the assignment of property rights include Pigouvian and severance taxes, and tradable permit schemes (TPS). A Pigouvian tax seeks to equalise private and social costs by taxing goods or services at a rate equivalent to the difference between the two,<sup>127</sup> while a severance tax is a tax on the extraction of natural resources.<sup>128</sup> An TPS assigns new property rights, for example, to emit

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<sup>124</sup> R H Coase, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1, especially at 41–42.

<sup>125</sup> Ibid 42.

<sup>126</sup> Ibid 17–18.

<sup>127</sup> Arthur Pigou, *The Economics of Welfare* (Macmillan, London, 3<sup>rd</sup> ed, 1929) 226.

<sup>128</sup> Page, *Conservation and Economic Efficiency*, above n 121, 11.

carbon in an emissions trading scheme, but also includes regulatory processes to manage the emissions allowed under the scheme, over time. If the scheme were designed purely on economic principles, emission rights under the scheme would be priced by reference to the private costs of mitigating the emissions.

### **2.1.2 Legal and Biophysical Limitations on Assigning Property Rights**

Various legal and biophysical issues can inhibit or prevent the creation of property rights, as can jurisdictional limits, whether national or, in a federation, sub-national. For example, the allocation of fishing rights over species with a range extending into international waters would require negotiation of international agreements to ensure complete coverage.<sup>129</sup> Similarly, in Australia, the Murray-Darling Basin water management scheme has required complex inter-jurisdictional arrangements to overcome the fact that the Basin straddles five jurisdictions.<sup>130</sup> Returning to the fisheries example, the allocation of fishing rights does not solve all the environmental issues associated with fisheries, as policy objectives addressing GEDD would need to go beyond targeting fish stocks, to maintaining the ecosystem of which those stocks form part. Allocating rights in ecosystems more generally, particularly ones with the difficult-to-observe characteristics of a marine ecosystem, would give rise to major practical difficulties associated with uncertain or unknown ecological interactions and boundaries, along with the integral nature of individual ecosystems that provide life-support services.

As to biophysical matters more generally, ecological systems are highly non-linear, with discontinuous dynamics near system thresholds, and the consequences of exceeding those thresholds and the costs of potentially irreversible and unprecedented change are fundamentally uncertain.<sup>131</sup> This uncertainty invalidates the normal test of efficiency in the allocation of resources, the price signal.<sup>132</sup> This has prompted scholars to argue that in such circumstances the sphere of economic activity must be bounded by reference to non-

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<sup>129</sup> Weimer and Viner use the term 'spatial stationarity' to distinguish between stationary and mobile environmental resources: see Weimer and Vining, *Policy Analysis: Concepts and Practice*, above n 123, 92–93.

<sup>130</sup> See Bell and Quiggin, 'The Limits of Markets: The Politics of Water Management in Rural Australia', (2008) 17(5) *Environmental Politics* 712.

<sup>131</sup> Charles Perrings and David Pearce, 'Threshold Effects and Incentives for the Conservation of Biodiversity' (1994) 4(1) *Environmental and Resource Economics* 13, 13, 16, 20–21. See also C S Holling et al, 'Biodiversity in the functioning of ecosystems: an ecological synthesis' in Charles Perrings et al (eds), *Biodiversity loss: Economic and ecological issues* (Cambridge University Press, 1995) which makes the point (at 48–49) that policies that apply fixed rules for achieving constant yields, such as a fixed carrying capacity for cattle, or a fixed sustainable yield for fish or wood, cause ecosystems increasingly to lack resilience, ie to the risk of sudden break-down in the face of disturbances that previously could be absorbed.

<sup>132</sup> Ibid 26.

economic criteria such as physical restrictions to avoid crossing ecological thresholds, or that economic activity must be constrained by adaptive and precautionary approaches.<sup>133</sup>

### 2.1.3 Complete Information

In the absence of complete information, environmental resources are under-valued and thus over-consumed partly because consumers do not appreciate their full social cost. In the simple but less-common case of environmental information held or readily obtained by the producer of a product, governments can rectify any information asymmetry by requiring sellers to disclose it to buyers. An Australian example is the *Water Efficiency Labelling and Standards Act 2013* (Cth), which requires that water-using products such as washing machines carry mandatory water efficiency labels. The scheme has been evaluated as having contributed ‘extensively’ to observed reductions in per capita water use.<sup>134</sup>

Typically however, environmental information relates to the natural world, is large-scale and systemic in nature, and is the product of investigation or research rather than commercial activity. The resulting complexity means that the information will often require case-by-case analysis by experts, while scale and systemic attributes may mean that the information is relevant primarily to *classes* of transaction, such as all transactions affecting a particular ecosystem, rather than to individual transactions. These attributes tend to make environmental information a public good: it is difficult to convert to private property because it is neither readily divided and made exclusive (in economic terms, ‘excludable’ so that it can be owned or controlled) and not readily given commercial value (in economic terms, ‘rivalrousness’).<sup>135</sup> As a result, market transactions in environmental resources will likely only be informed to the degree that the relevant information is provided by government as a public good, and to the extent that the environment is understood:

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<sup>133</sup> Ibid 27; Kenneth Arrow et al, ‘Managing Ecosystem Resources’ (2000) 34(8) *Environmental Science & Technology* 1401. See also Arrow, Kenneth et al, ‘Are We Consuming Too Much?’ (2004) 18(3) *The Journal of Economic Perspectives* 147, 168.

<sup>134</sup> Water Efficiency Labelling and Standards Regulator, *Second Independent Review of the WELS Scheme* (Department of the Environment 2015) 6.

<sup>135</sup> Pure public goods are neither rivalrous nor excludable, while impure public goods possess one of these attributes. Recognising that there are varying degrees of rivalrousness and excludability, Cornes and Sandler visualise goods on a spectrum, rather than within the traditional matrix of four categories of goods (private goods, open-access resources, congestible resources and public goods): see Richard Cornes and Todd Sandler, *The Theory of Externalities, Public Goods, and Club Goods* (Cambridge University Press, 1996), 9. Not all research-derived information is a public good. For example, highly localised and near-real time weather forecasts are valuable to aviation and shipping.

uncertainty remains a major issue.<sup>136</sup> Given the impossibility of fully environmentally-informed markets, more complete environmental information would at least allow governments to correct market failure to much greater effect, for example by imposing environmental taxes at closer to the theoretically ideal rates that would equilibrate demand for the resources of an ecosystem with the rate at which that ecosystem can regenerate.

## **2.2 A Limitation of Economics: Markets Reflect Current Preferences**

Viewed as a problem of demand exceeding supply, GEDD can only be solved by bringing demand for, and supply of, environmental resources into equilibrium. Given the limits to the productivity of nature that will be discussed in chapter three, solving GEDD will require that the rate at which environmental resources are consumed does not, over the long term, exceed the rate at which nature is able to renew those resources.<sup>137</sup> In other words, GEDD is inherently an intergenerational problem. Economic theory is based on, and competitive markets reflect, the preferences of the current generation, which may or may not be shared by future generations.<sup>138</sup> This has two relevant consequences. First, in considering interventions to correct market failure, governments guided by welfare economics will calculate the costs and benefits of doing so according to current preferences.<sup>139</sup> Second, individual market actors will make decisions about whether to consume or save environmental resources on the basis of their current preferences. In both instances this means that the question of whether such decisions solve the problem of GEDD will depend on the extent to which current and future preferences align.

### **2.2.1 Impact of Selfish Altruism on Attempts to Address Market Failure**

The standard welfare-economic approach in evaluating the case for government intervention to correct putative market failure is to assess whether the benefits of intervening exceed the costs and thus increase social welfare and the standard decision-

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<sup>136</sup> Governments can potentially gain some of the efficiency benefits of a market in information by acting as a purchaser rather than direct provider, but because the resulting quasi-markets are ‘thin’ in Australia, lacking suppliers, decisions to change provider can offset such gains by dissipating intellectual and other capital. A current Australian example of a quasi-market in research is the National Environmental Science Program, under which research providers bid for research funding on a competitive basis: see Department of the Environment, ‘National Environmental Science Programme Guidelines 2014’ (DoE 2014).

<sup>137</sup> Discussion here is confined to renewable resources: see 1.5.1.

<sup>138</sup> Robert Goodland and George Ledec, ‘Neoclassical Economics and Principles of Sustainable Development’ (1987) 38(1) *Ecological Modelling* 19, 33.

<sup>139</sup> Richard B Norgaard, ‘Sustainability as Intergenerational Equity: Economic Theory and Environmental Planning’ (1992) 12 *Environmental Impact Assessment Review* 85, 92.

support tool for these purposes is CBA.<sup>140</sup> While several technical issues affect the capacity of CBA to inform interventions to correct environmental market failures, those related to selfish altruism are the most significant here and thus the focus of discussion.

As its name suggests, CBA involves adding and comparing costs and benefits. Ideally costs and benefits represent actual market values, which are *revealed* preferences. Many environmental goods however are not traded and have no market value. While alternative valuation techniques based on inferred or stated preferences are often contested, for example on the ground that preferences stated in response to a survey question may be unrealistic,<sup>141</sup> the more fundamental issue here is that, however ascertained, those valuations are always based on the preferences of the present generation, as they must be because future preferences are unknown. If future preferences were to depart significantly from current preferences (an occurrence of unknown probability) the relativities between future prices would be significantly different to current relativities. As a result, estimates of future costs and benefits used in CBA today would be inaccurate and decisions made would be poorly targeted. For example, the future availability of cheap, plentiful and environmentally-benign energy derived from nuclear fusion would likely reduce significantly the willingness of market actors to pay for fossil fuels, and the vast array of goods and services currently dependent on them, with major implications for future costs and benefits.

Even if future preferences were qualitatively the same as current preferences and valuation problems were resolved, estimated future costs and benefits are then discounted according to current preferences. Economists disagree about discount rates,<sup>142</sup> but even if they were to agree, the discount rate would still be calculated by applying the Ramsey social discount formula.<sup>143</sup> This formula defines the social discount rate as the sum of two components. The first is the social rate of pure time preference, the rate at which the present generation discounts future utility on the basis of valuing immediate consumption more highly than

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<sup>140</sup> In welfare-economic theory, the existence of a market failure establishes only a *prima facie* case for government intervention: see Abelson Public Economics, n 119 above, 67. To complete the case for government intervention, it is also necessary to establish that the benefits of correcting market failure exceed the 'dangers' of intervention (ie the risk of government failure replacing market failure): see Richard O Zerbe and Howard E McCurdy, 'The Failure of Market Failure', (1999) 18(4) *Journal of Policy Analysis and Management* 558, 560. For this theoretical discussion it is only necessary to consider the first of these conditions as the second will usually depend on case-specific matters.

<sup>141</sup> For a discussion of non-market valuation of environmental resources, see M S Common, R K Blamey and T W Norton, 'Sustainability and Environmental Valuation' (1993) 2(4) *Environmental Values* 299.

<sup>142</sup> See for example Kenneth J Arrow et al, 'Should Governments Use a Declining Discount Rate in Project Analysis?' (2014) 8(2) *Review of Environmental Economics and Policy* 145.

<sup>143</sup> F P Ramsey, 'A Mathematical Theory of Saving' (1928) 38(152) *The Economic Journal* 543.



future consumption. (Irving called this the ‘rate of impatience’.<sup>144</sup>) The second is the growth rate of consumption (ie economic growth), weighted by the elasticity of the marginal utility of consumption, to take account of the fact that as the economy grows, any increase in consumption is, proportionately, of less significance.<sup>145</sup> For example, a dollar of benefit in a decade is worth less than a dollar of benefit today because society will be wealthier and a dollar will represent a smaller share of consumption. This gives the formula:

$$\rho = \delta + \eta \cdot g$$

where  $\rho$  is the social rate of interest on consumption,  $\delta$  is the social rate of pure time preference,  $\eta$  is the elasticity of marginal social utility of consumption and  $g$  is the rate of growth in aggregate consumption. Note that  $\eta$  also represents intergenerational inequality aversion, since the elasticity of marginal social utility of consumption can be interpreted as reflecting the maximum sacrifice that one generation should make to transfer wealth to another.<sup>146</sup>

Without entering into the many technical complexities and extensive literature associated with the application of the Ramsey formula, the implication here is that even if future price relativities can be assumed to be the same as current relativities and valuation methods accurate, thus validating the *raw* estimates of future costs and benefits, the *adjusted* value of those future costs and benefits turns largely on the preferences (ie attitudes based on taste, not principles) of the present generation concerning deferred consumption and intergenerational inequality. Under discount rates commonly applied and which are often derived from the rates applied in markets, the tendency of the Ramsey formula is to assess long-term costs and benefits as minor or negligible beyond a period of around 50 years, implying decisions that pay little regard to impacts beyond two generations.<sup>147</sup> Various approaches by economists to adjusting the application of the Ramsey formula to take account of the selfish altruism problem such as the prescribing of low or declining discount rates may reduce the impact of this tendency, but these approaches, especially the use of very low rates, remain disputed within economics on various grounds, including that

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<sup>144</sup> Irving Fisher, *Elementary Principles of Economics* (The Macmillan Company 1912) 371.

<sup>145</sup> Kenneth J Arrow et al, ‘Should Governments Use a Declining Discount Rate in Project Analysis?’, above n 142, 146.

<sup>146</sup> Ibid 152.

<sup>147</sup> Taking an impact with a net present value of less than five cents in the dollar as minor and less than one cent in the dollar as negligible, at the official Australian social discount rate for regulatory interventions of 7%, Department of the Prime Minister and Cabinet, ‘Cost-Benefit Analysis, Guidance Note’ (PM&C 2016), the present value of an impact of one dollar of environmental harm becomes minor if occurring more than 43 years hence and negligible after 63 years. Even at a low 4%, the present value becomes minor after 74 years and negligible after 108 years.

such adjustments are prescriptive (ie normative) when rates should be descriptive (ie empirically based).<sup>148</sup>

### 2.2.2 Limits of Welfare Economic Prescriptions for the Environment

Market failure aside, the maximisation of present value criterion implies that, even in a complete system of competitive and fully informed markets, or where governments have completely internalised externalities, renewable resources could be consumed beyond their replacement rate and, in extreme cases, to exhaustion. This is because, if the regeneration rate of the resource — its productivity — is less than the discount rate — the rate of impatience — the optimum approach is ‘harvest without replacement’,<sup>149</sup> which in extreme cases could, to use Clark’s terminology, result in ‘optimal extinction’.<sup>150</sup> Even though prices in a system of efficient markets would in principle take full account of extinction risk, harvesting to a point that would risk or even cause extinction will occur if the present generation ascribes a sufficiently low value to future consumption. Such an outcome would become increasingly more likely in relation to decisions that involve impacts over increasingly long periods.

## 2.3 Conclusions on Mainstream Approaches as a Solution to GEDD

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<sup>148</sup> See for example the United Kingdom ‘Stern Report’ on climate change policy: Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007). Stern chose a very low discount rate, primarily by reference to an ethical principle of intergenerational equity rather than market behaviour; Garnaut followed suit in advising the Australian Government: Ross Garnaut, *The Garnaut Climate Change Review: Final Report* (Cambridge University Press, 2008) 19. Despite the fact that the views of some eminent economists provided a precedent for adopting a zero discount factor for utility, Stern’s approach has been heavily criticised and it seems that most economists favour an approach based on observed behaviour: see for example Martin L Weitzman, ‘A Review of “The Stern Review on the Economics of Climate Change”’ (2007) 45(3) *Journal of Economic Literature* 703, 709. As to declining discount rates, see Arrow et al, ‘Should Governments Use a Declining Discount Rate in Project Analysis?’, above n 142. Note that in any event low discount rates do not necessarily secure favourable environmental outcomes, because low rates encourage investment, which increases the demand for environmental resources overall: see David Pearce, Anil Markandya and Edward B Barbier, *Blueprint for a Green Economy* (Earthscan Publications, 1989) 150.

<sup>149</sup> Richard B Norgaard, ‘Sustainability as Intergenerational Equity: Economic Theory and Environmental Planning’ (1992) 12 *Environmental Impact Assessment Review* 85, 100.

<sup>150</sup> Colin Whitcomb Clark, *Mathematical Bioeconomics: The Optimal Management of Renewable Resources* (Wiley, 1976) 60, 62–63. Clark explains (at 63) that when discount rates exceed the growth rate of a natural resource, managing that resource may become unprofitable and, for example ‘virgin forests may simply be chopped down and the land abandoned.’ See also Pearce, Atkinson and Dubourg, ‘The Economics of Sustainable Development’, above n 117, 460.

A mainstream approach of ensuring a system of complete competitive and fully-informed markets, or, where this is not achievable, by designing and implementing policy interventions on the basis of applying the tenets of welfare economics to mimic efficient market outcomes, would advance a goal of reversing GEDD significantly. The internalisation of externalities, whether by the assignment of property rights or government interventions to mimic market outcomes, would encourage production efficiency, recycling, innovation and substitution from higher-environmental impact to lower-environmental impact forms of consumption. Comprehensive environmental information would encourage decisions that minimised environmental harm, whether by allowing private investors to avoid environmental impacts that might reduce the value of investments, or by allowing government to better-target interventions to correct market failures. However, even if it were possible to create such a market system, this would not 'solve' GEDD completely. By definition, decisions that are based solely on current preferences cannot take into account the changes in relative values that will occur if future preferences change, while the discounting of future values to take account of the time preference of the present generation will ascribe a lesser value to costs borne by future rather than current generations. The result is likely to be over-consumption of environmental resources, increasingly so under decisions that involve increasingly long-term costs and benefits, leaving future generations without the level of resources they need to maintain a quality of life that is at least as high as that we enjoy now.

Once it is accepted that avoiding long-term impacts over generations is necessary to the social goal of reversing GEDD, the adoption of a normative principle concerning future generations becomes essential to any policy response. The problem is not one of efficiency alone, but also of distribution across generations.

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## CHAPTER THREE

### ORIGINS, MEANING AND VIABILITY OF ESD AS THE GOAL OF ENVIRONMENTAL POLICY IN AUSTRALIA

*It is very hard to be against sustainability. In fact, the less you know about it, the better it sounds.*

Robert M Solow<sup>151</sup>

Ecologically Sustainable Development is a complex concept with deep roots in other sustainability concepts and their antecedents. It is better understood in the context of the problems addressed by those concepts and in contrast with them. Rather than review the extensive literature comprehensively, this chapter takes a teleological approach, tracing the emergence of major sustainability concepts as a prelude to considering the meaning and viability of ESD as a domestic social goal responding to GEDD. (For this reason, and for convenience, the concepts are discussed in a broadly chronological order.) A clear conception of ESD in this context will provide a foundation for the case studies in the chapters that follow, which evaluate the success of certain Australian policies designed to advance ESD.

### 3.1 Antecedents of Sustainable Development

#### 3.1.1 Early Sustainability Concepts

Arguments for a social response to environmental degradation on a landscape scale, which we would now describe as sustainability concerns and concepts, date back at least to ancient times,<sup>152</sup> but the focus here is modern. During the Enlightenment, sustainability concerns and concepts were advanced on both moral and practical grounds. Locke attached a proviso to his proposed right of individuals, earned through labour, to arrogate

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<sup>151</sup> Robert M Solow, 'Sustainability: an Economist's Perspective' in Robert Stavins (ed) *Economics of the Environment: Selected Readings* (W W Norton & Company, 4<sup>th</sup> ed, 2000) 131.

<sup>152</sup> See Jacobus Du Pisani, 'Sustainable Development — historical roots of the concept', above n 13, 83.

natural goods to themselves as private property; this right would apply 'at least where there is enough, and as good left in common for others'.<sup>153</sup> In contrast, in early eighteenth century Germany it was wood shortages that prompted discussion in forestry circles on the responsible use of natural resources in the interests of present and future generations. This led Von Carlowitz to propose a principle of *nachhaltende Nutzung* (sustainable use), implying a balance between the harvesting and recruitment of trees.<sup>154</sup> Late in the eighteenth century, it was the French Revolution that prompted Thomas Jefferson to reflect on the rights of the present generation to bind those coming after, prompting him to argue that 'the earth belongs in usufruct to the living'.<sup>155</sup> This was a reference to the Roman civil law concept *ususfructus*, the right to use the land and take produce, without impairing its substance.<sup>156</sup>

Later, during the industrial revolution, it is not surprising that accelerating population growth and economic development would generate concerns that were more global in nature and as time progressed, more pressing. At the turn of the nineteenth century Malthus contrasted the arithmetic rate of growth of food production with the geometric rate of population increase and concluded that population growth would outstrip the supply of food.<sup>157</sup> Malthus' concerns were not realised because he did not take sufficient account of either productivity improvements driven by technology, or the vast lands of the New World. An unfortunate side-effect was that concerns about resource exhaustion came to be described pejoratively as 'Malthusian'.<sup>158</sup> Yet such concerns persisted. In 1865 Jevons argued that Britain's supply of coal, the 'mainspring of modern material civilization', as well as the mainspring of her global power, would be outstripped by demand.<sup>159</sup> Jevons considered substitutes, but concluded that no viable substitute was available. Once again

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<sup>153</sup> John Locke, Second Treatise, s27, quoted in Susan P Liebell, 'The Text and Context of "Enough and as Good": John Locke as the Foundation of an Environmental Liberalism' (2011) 43(2) *Polity* 210.

<sup>154</sup> Du Pisani, above n 13, 85–86.

<sup>155</sup> Thomas Jefferson, letter dated 6 September 1789 to James Madison, cited in Terrence Ball, "'The Earth Belongs to the Living': Thomas Jefferson and the Problem of Intergenerational Relations" (2000) 9(2) *Environmental Politics* 61, 64.

<sup>156</sup> Adolf Berger, *Encyclopedic Dictionary of Roman Law* (The American Philosophical Society 1953), definition of 'ususfructus'.

<sup>157</sup> See Thomas Malthus, *An Essay on the Principle of Population and a Summary View of the Principle of Population* (Pelican, originally published 1798, 1985 ed).

<sup>158</sup> A modern example of 'neo-Malthusianism' is *Limits to Growth* (1972), which one scholar described as 'Malthus with a Computer': Christopher Freeman, 'Malthus with a Computer' (1973) 5(1) *Futures* 5.

<sup>159</sup> W Stanley Jevons, *The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of our Coal-mines* (Macmillan and Co, 3<sup>rd</sup> ed 1906) [1865] 1, 2–3, 163–164, 165–168; W S Jevons, 'On Coal', Lecture Delivered in the Carpenter's Hall of Manchester, 1867, in R D C Black, *Papers and Correspondence of William Stanley Jevons*, vol 7 (Macmillan 1981) 18–28, cited in Antoine Missemer, 'William Stanley Jevons' The Coal Question (1865), beyond the Rebound Effect' (2012) 82 *Ecological Economics* 97, 99.

the fear did not materialise, as, facilitated by new technology, oil replaced coal in many applications over the subsequent century.

The contemporaneous concerns of American naturalist George Perkins Marsh went beyond the supply of food or energy to the impact of humans on nature itself:

[W]e are, even now, breaking up the floor and wainscoting and doors and window frames of our dwelling, for fuel to warm our bodies and seethe our pottage, and the world cannot afford to wait till the slow and sure progress of exact science has taught it a better economy.<sup>160</sup>

This dramatic warning did not elicit an immediate government response in America, but Marsh's writing is often credited as a major stimulus to American conservation movements which became influential in the late nineteenth century. Marsh was also widely read in Australia and can be regarded as a significant influence behind the first sustained questioning of resource use that occurred here in decades following the publication of his book, arising from concerns that included forest destruction, ringbarking and erosion.<sup>161</sup>

An interesting feature of sustainability thinking from the 1860s onwards is that it starts to stimulate policy thinking and responses. The British Government responded to Jevons' work by calling a Royal Commission, essentially to check the facts.<sup>162</sup> Jevons himself, a pioneer of neoclassical economics, argued that, while it lasted, coal-reliant wealth should be invested wisely in improving the condition of all,<sup>163</sup> a solution bearing a strong similarity to Hartwick's 'savings-investment rule' proposed just over a century later (see 3.2.2).<sup>164</sup> In America, the conservationism stimulated by Marsh and others ultimately prompted President Theodore Roosevelt to establish a National Conservation Commission in 1908, to make the first survey of the natural resources of the United States.<sup>165</sup>

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<sup>160</sup> George Perkins Marsh, *Man and Nature* (The Belknap Press of Harvard University Press, first published 1864, 1965 ed) 52.

<sup>161</sup> Kevin Frawley, 'Evolving visions: Environmental management and nature conservation in Australia' in Stephen Dovers (ed), *Australian Environmental History: Essays and Cases* (Oxford University Press 1994) 67.

<sup>162</sup> Great Britain and Coal Commission, *Report of the Commissioners Appointed to Inquire into the Several Matters Relating to Coal in the United Kingdom*. (HMSO 1871). Even though the Commission did not lead to a direct policy response, it appears to be the first example of a government taking a sustainability issue seriously.

<sup>163</sup> Jevons, 'On Coal' 1867, quoted in Missemmer, above n 159, 100.

<sup>164</sup> Missemmer makes essentially the same point, though using terminology of intergenerational compensation and weak sustainability: see Missemmer, above n 159, 100.

<sup>165</sup> See National Conservation Commission, D Washington (ed), Henry Gannett Henry and United States President Roosevelt, *Report of the National Conservation Commission, February, 1909: Special Message from the President of the United States, Transmitting a Report of the National Conservation Commission, with Accompanying Papers* (Arno Press, 1972). The Report is sometimes referred to as the Gannett Report, after Henry Gannett, chair of the Commission's Executive Committee which directed the drafting of the report, rather than after Gifford Pinchot, the Chair of the Commission. The Commission completed an inventory within six months but it expired because Congress would not approve government funding.

### 3.1.2 The Post-War Period: Resource Security and Safe Minimum Standards

Unsurprisingly, sustainability concerns were much less prominent during the inter-war years given the Depression-era focus on stimulating consumption, but the unprecedented resource demands of World War II and the incipient boom in the years immediately following saw an upturn in concern about the capacity of nature to sustain economic growth.<sup>166</sup> The United States government commissioned a report from a Commission headed by William Paley into the availability of natural resources into the future which reached optimistic conclusions,<sup>167</sup> but this was in part because the report assumed a global scope for supply, while considering only American demand.

Most notably during this post-war period, Ciriacy-Wantrup was the first to propose a comprehensive economic response to issues of natural resource conservation and supply. Defining the goal of conservation policy conventionally as 'that state of conservation which maximises social net revenues over time', he argued that the standard welfare-economic approach to assessing that maximum was impractical. This was in part due to general uncertainties of technology, preferences and social institutions concerning the future, and to the limitations of welfare economics including issues associated with discounting.<sup>168</sup> But this impracticality was especially due to the uncertainty of irreversible depletion of 'an important class of flow resources', including soil, water, plants and animals. This uncertainty created a 'critical zone' in which it would be uneconomic to halt and reverse the depletion, thus giving rise to the possibility of an 'immoderate social loss'.<sup>169</sup> Ciriacy-Wantrup's response was to propose 'safe minimum standards for conservation' (SMS) as the basis for conservation policy.<sup>170</sup> An SMS would be achieved by avoiding the critical zone; for example an SMS for water resources might specify the maximum allowable levels of pollution or a 'safe yield' for drawing water from an aquifer.<sup>171</sup>

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<sup>166</sup> See Samuel Ordway, *Resources and the American Dream* (The Ronald Press, New York, 1953); Fairfield Osborn, *Our Plundered Planet* (Little Brown & Co, 1948) and *Limits of the Earth* (Little Brown & Co, Boston, 1953).

<sup>167</sup> United States, President's Materials Policy Commission (William S Paley, Chairman), *Resources for freedom: a report to the President* (US Government Printing Office, Washington, 1952).

<sup>168</sup> S V Ciriacy-Wantrup, *Resource Conservation: Economics and Policies* above n 71, 79.

<sup>169</sup> Ibid 38–39, 256–257.

<sup>170</sup> Ibid Chapter 18.

<sup>171</sup> Ibid 253, 258.



The significance of Ciriacy-Wantrup's work is that he proposes, several decades before others, that welfare maximisation by current generations be subject to a set of physical constraints on consumption of renewable resources. Although these constraints were predicated on a loss of economic welfare rather than a loss of environmental function and assumed rather than articulated the value of future generations, broadly his work anticipates much of the strong sustainability thinking of nearly forty years later.<sup>172</sup>

### 3.1.3 Early 'Modern Environmental Era' Sustainability Concepts

The modern environmental era is often dated from the publication of Rachel Carson's *Silent Spring* in 1962, which dealt with the impacts of broad-scale use of pesticides in the USA.<sup>173</sup> While *Silent Spring* itself went no further than proposing technical solutions to the problems it identified, such as the use of biological control agents, it is widely credited with triggering the environmental movement that was so prominent in the West in the subsequent decade. Environmental concerns would soon become global in both nature and extent, prompting the rapid emergence of new sustainability concepts.

#### *Recognition of Thermodynamic Limits and Capital Qualities of Nature*

Kenneth Boulding's 1966 essay *The Economics of the Coming Spaceship Earth* marks a watershed in sustainability thinking, with its narrative of an emerging human realisation that the earth is a closed system, a fact with dramatic economic implications. Boulding is thus worth quoting at some length:

We are now in the middle of a long process of transition in the nature of the image which man has of himself and his environment. Primitive men imagined themselves to be living on a virtually illimitable plane... The image of the frontier is probably one of the oldest images of mankind and it is not surprising that we find it hard to get rid of.

Gradually, however, man has been accustoming himself to the notion of the spherical earth and a closed sphere of human activity...it was not until the end of the Second World War and the

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<sup>172</sup> See 3.2.4 below. Turner has identified strong sustainability as akin to SMS: R Kerry Turner, 'Sustainability: principles and practice' in R Kerry Turner (ed), *Sustainable Environmental Economics and Management: Principles and Practice* (Belhaven Press, 2<sup>nd</sup> ed, 1993) 14. Spash also draws attention to the work of Kapp during this same period in taking identifying environmental problems as pervasive social costs rather than externalities: see Clive L Spash, 'The Development of Environmental Thinking in Economics' (1999) 8(4) *Environmental Values* 413, 417, citing K W Kapp, *The Social Costs of Private Enterprise* (Shocken, 1950).

<sup>173</sup> Carson, *Silent Spring*, above n 14.

development of the air age that the global nature of the planet really entered the popular imagination. Even now we are very far from having made the moral, political, and psychological adjustments which are implied in this transition from the illimitable plane to the closed sphere.

Economists in particular, for the most part, have failed to come to grips with the ultimate consequences of the transition from the open to the closed earth.<sup>174</sup>

Boulding explains that, biologically, individual humans are open systems, receiving inputs such as food and water and giving off outputs of effluvia and effluent, while human societies have likewise been open systems, receiving natural resource inputs and giving outputs (waste). Energy inputs come principally from the sun, but in advanced societies have been supplemented very extensively by the use of fossil fuels,<sup>175</sup> a state of affairs that is, due to the laws of physics, strictly temporary.<sup>176</sup> Therefore:

The closed earth of the future requires economic principles which are somewhat different from those of the open earth of the past ... I am tempted to call the open economy the "cowboy economy" ... The closed economy of the future might similarly be called the "spaceman" economy, in which the earth has become a single spaceship, without unlimited reservoirs of anything, either for extraction or for pollution, and in which, therefore, man must find his place in a cyclical ecological system which is capable of continuous reproduction of material form even though it cannot escape having inputs of energy ...<sup>177</sup>

The implication was the need for a dramatic shift in society's overarching policy goal, from maximising throughput to maximising stocks:

By contrast, in the spaceman economy, throughput is ... regarded as something to be minimized rather than maximized. The essential measure of the success of the economy is not production and consumption at all, but the nature, extent, quality, and complexity of the total capital stock...In the spaceman economy, what we are primarily concerned with is stock maintenance...This ideal that both production and consumption are bad things rather than good things is very strange to economists, who have been obsessed with the income-flow concepts to the exclusion, almost, of capital-stock concepts.<sup>178</sup>

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<sup>174</sup> Kenneth E Boulding, 'The Economics of the Coming Spaceship Earth' in H Jarrett (ed), *Environmental Quality in a Growing Economy* (Resources for the Future/John Hopkins University Press, 1966) 3–4.

<sup>175</sup> Ibid.

<sup>176</sup> Ibid 5–6

<sup>177</sup> Ibid 5–6.

<sup>178</sup> Ibid 9–10.

Boulding acknowledged that these problems might be ‘at least beyond the lifetimes of any now living’ and that people might object to the idea of sharing resources across generations:

It is always a little hard to find a convincing answer to the man who says, “What has posterity ever done for me?”...Why should we not maximize the welfare of this generation at the cost of posterity?<sup>179</sup>

His answer was based on the value of society:

[T]he welfare of the individual depends on the extent to which he can identify himself with others ... the most satisfactory individual identity is that which identifies not only with a community in space but also with a community extending over time ...<sup>180</sup>

This is not far removed from the principle of intergenerational equity that would emerge several decades later as countries engaged with these problems through the UN.<sup>181</sup>

Boulding had made his argument discursively. Georgescu-Roegen reached a similar conclusion by close scientific analysis, concluding that the earth was an open system only with respect to energy and that as a result the second law of thermodynamics, the principle of *entropy* dictated that the earth’s finite natural resources cannot be replaced as they are degraded, through a one-way process of production and consumption, into waste.<sup>182</sup> As a result, ‘the entropy law is the taproot of economic scarcity’<sup>183</sup> and:

[o]ne of the most important ecological problems for mankind, therefore, is the relationship of the quality of life of one generation with another — more specifically, the distribution of mankind’s dowry *among all generations*.<sup>184</sup>

### *The Steady-State Economy*

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<sup>179</sup> Ibid 11.

<sup>180</sup> Ibid.

<sup>181</sup> See 3.2.6.

<sup>182</sup> Nicholas Georgescu-Roegen *The Entropy Law and the Economic Process* (Harvard University Press, 1971).

<sup>183</sup> Ibid 9.

<sup>184</sup> Ibid 30 (original emphasis).

Melding Georgescu-Roegen's conclusions about the implications of entropy with John Stuart Mill's earlier concept of 'the stationary state' of capital and population, derived from a concern that in an overcrowded world there would be 'nothing left to the spontaneous activity of nature',<sup>185</sup> Daly proposed the 'steady-state economy':

An economy in which the total population and the total is in constant at some of the levels by a 'minimal' rate of maintenance throughput (ie, by birth and death rates that are equal at the lowest feasible level, and by physical production and consumption rates that are equal at the lowest feasible level).<sup>186</sup>

Arguing that '[w]e have moved from a relatively empty world to a relatively full world ...',<sup>187</sup> Daly proposed a policy response with three components: zero population growth, to be achieved by licensing couples to have children; maintaining constant physical wealth, to be achieved through pollution quotas and resource-depletion quotas; and controlling the distribution of wealth, in particular by imposing an upper limit.<sup>188</sup> Despite sharing some elements of analysis and approach with Sustainable Development as later proposed, the steady-state economy has not been influential in the policy mainstream. A key reason for this is that Daly argues for zero economic growth and for radical prescriptions to achieve it, rather than for the standard economic approach of correcting prices to discourage undesirable consumption. As Nordhaus and Tobin put it, '[z]ero economic growth is a blunt instrument'.<sup>189</sup> Yet in a number of ways Daly has been consistently ahead of his time and otherwise influential in environmental policy thinking. In essence, he anticipated the substance of strong sustainability, discussed in 3.2.5 below, by adopting the idea of an

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<sup>185</sup> John Stuart Mill, W J Ashley (ed), *Principles of Political Economy with Some of Their Applications to Social Philosophy* (Longmans Green, New Impression, first published 1848, 1923 ed). (at 750).

<sup>186</sup> Herman E Daly, 'The Steady-State Economy' in Herman E Daly (ed), *Toward a Steady-State Economy* (W H Freeman and Company, 1973) 152–153.

<sup>187</sup> Herman E Daly, 'Allocation, Distribution, and Scale: Towards an Economics That Is Efficient, Just, and Sustainable' (1992) 6 *Ecological Economics* 185, 187; see also Herman E Daly, 'From empty-world to full-world economics: Recognizing an historical turning point in economic development' in Robert Goodland et al (eds), *Environmentally Sustainable Economic Development: Building on Brundtland* (UNESCO 1992).

<sup>188</sup> Daly *Toward a Steady State Economy*, above n 186, 158, 160, 168.

<sup>189</sup> William D Nordhaus and James Tobin, 'Is Growth Obsolete?', *Economic Research: Retrospect and Prospect Vol 5: Economic Growth* (National Bureau of Economic Research 1972) 17. Daly has also been criticised for being less the academic and more the advocate in his work; for example, Stiglitz described Daly's article 'Georgescu-Roegen versus Solow/Stiglitz' (1997) 22 *Ecological Economics* 261 as a 'tirade concerning our work' (Joseph E Stiglitz, Reply, 'Georgescu-Roegen versus Solow/Stiglitz', (1997) 22 *Ecological Economics* 269, at 269). An attempt to demonstrate the need for the steady-state economy on the basis of modelling, the Club of Rome's *Limits to Growth* (Meadows et al, above n 18) has been strongly criticised, in part because of its heavy reliance on assumptions and also on the basis of failing to take into account the future influence of rising prices as resource-scarcity increased: see K L R Pavitt, 'Malthus and Other Economists: Some Doomsdays Revisited' (1973) 5(2) *Futures* 157; Christopher Freeman, 'Malthus with a Computer', above n 158, 5.

unpublished economist that ‘equilibrium-centred stability’, which is based on being at an ‘optimum point’, should be replaced by ‘boundary-oriented stability’, in which ‘generality of resilience takes precedence over speed of adjustment, and “satisficing” takes precedence over optimising’.<sup>190</sup> The result is that:

The equilibrium-centred view concentrates on finding the peak of the mountain as quickly as possible. The boundary-oriented view builds fences along the edges of all chasms ... Boundary-oriented stability tends to minimise future regrets rather than maximise present satisfaction.<sup>191</sup>

*Moving Towards Sustainability Concepts from the Bottom Up: The Ubiquity of Environmental Externalities and the Need to Account for Capital*

Another significant development in sustainability thinking during this period of intense environmental concern emerged not from deductive analysis of the fundamental laws of physics applied to the earth as a system, but from Ayres’ and Kneese’s basic empirical observation that externalities arising from pollution were not the exception, as economic literature had tended to assume, but a ‘normal, indeed, inevitable part of the process of production and consumption’.<sup>192</sup> The implications of this simple observation, limited initially to pollution but with the expectation that it would apply more broadly, are profound.<sup>193</sup> With intensified development and having regard to the law of conservation of mass, the assimilative capacities of the environment were scarce and must be regarded as common property resources rather than a public good. The consequence was that pollution externalities could no longer be dealt with in an ad hoc manner, and materials such as food could no longer be treated as services rather than goods.<sup>194</sup> Instead, they should be treated systematically and incorporated into a general equilibrium of resource allocation, in which outputs and inputs always balance. Under this approach to Pareto optimality, residuals would need to be priced appropriately or investments made to increase assimilative capacity.<sup>195</sup> Although Ayres and Kneese acknowledge Boulding’s ‘spaceship earth’ as an influence rather than a source,<sup>196</sup> the implications of Boulding’s and Ayres’ and

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<sup>190</sup> Herman E Daly, *Steady State Economics: Second Edition with New Essays* (Island Press, 2<sup>nd</sup> ed, 1991) 53, citing Michael Goldberg, ‘Less is More’, unpublished manuscript, 1976.

<sup>191</sup> Ibid.

<sup>192</sup> Robert U Ayres and Allen V Kneese, ‘Production, Consumption and Externalities’ 1969 59(3) *The American Economic Review* 282, 282.

<sup>193</sup> Ibid. Ayres and Kneese explain in footnote 2 that although their argument was made only in relation to residuals, ‘[w]e by no means wish to imply that this is the only important class of externalities associated with production and consumption.’

<sup>194</sup> Ibid 284.

<sup>195</sup> Ibid 293, 295.

<sup>196</sup> Ibid 289, footnote 9.

Kneese's approaches are similar: environmental resources and residuals are best conceived of as a system of stocks and flows, with the further implication that if stocks, including assimilative capacity, were run down then, as with any enterprise or endeavour reliant on capital to produce income, the enterprise could not endure.

## 3.2 Emergence and Evolution of Modern Sustainability Concepts

The concept of 'Sustainable Development' as a global social goal was the centrepiece of the Brundtland Report in 1987.<sup>197</sup> Within five years of the report's publication SD had become a global phenomenon and been endorsed as an international policy goal at the United Nations Conference on Environment and Development or 'Earth Summit' held at Rio De Janiero in 1992 (the Rio Conference). This section considers, from an Australian perspective, the path to that endorsement, beginning with the United Nations Conference on the Human Environment, held in Stockholm in 1972 (the Stockholm Conference) and passing through the World Conservation Strategy of 1980 and its 1984 Australian derivative, the Nature Conservation Strategy for Australia. It also considers two major sustainability concepts that emerged from scholarly analysis, rather than policy deliberation, now known as 'weak sustainability' and 'strong sustainability' respectively.

### 3.2.1 The Stockholm Declaration

The Stockholm Conference was convened largely as a result of Western concerns about the deterioration of the environment, the proximate cause being the impact of acid rain in Sweden, caused by cross-border pollution.<sup>198</sup> The conference produced the Declaration of the United Nations Conference on the Human Environment (*'Stockholm Declaration'*)

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<sup>197</sup> WCED, above n 7. The Brundtland Report was the third in a series of major reports produced by the UN in the 1980s. The Brandt Commission (1980) (the Independent Commission on International Development Issues) dealt with world economic development, and the Palme Commission (1983) (Independent Commission on Disarmament and Security Issues) dealt with peace and security. While Brundtland's terms of reference were cast principally in terms of the 'environmental perspective to the year 2000' (see United Nations, 'Process of preparation of the Environmental Perspective to the Year 2000 and Beyond', GA Res 38/161, UNGAOR, 38<sup>th</sup> sess, 102<sup>nd</sup> plen mtg, UN Doc A/RES/38/161, 19 December 1983 (19 December 1983) Brundtland and her colleagues interpreted that perspective very broadly, making the alleviation of poverty, and intragenerational equity more generally, a major theme of the report.

<sup>198</sup> See Wade Rowland, *The Plot to Save the World: The Life and Times of the Stockholm Conference on the Human Environment* (Clarke, Irwin and Co, 1973).

consisting of seven proclamatory paragraphs and 26 principles,<sup>199</sup> supported by the Action Plan for the Human Environment (*Stockholm Action Plan*).<sup>200</sup>

The central environmental narrative of the *Stockholm Declaration*<sup>201</sup> is that, in environmental terms, humanity stands at the crossroads. The natural environment is essential to human well-being<sup>202</sup> and humanity's capability to transform its surroundings, used wisely, can bring the benefits of development. However, if wrongly or heedlessly applied, the same power can do incalculable harm to human beings and the human environment, of which harm there was growing evidence.<sup>203</sup> As a result:

*To defend and improve the human environment for present and future generations* has become an imperative goal for mankind — a goal to be pursued together with, and in harmony with, the established and fundamental goals of peace and of worldwide economic and social development.<sup>204</sup>

Despite the level of concern, optimism and instrumentalism were the order of the day: this was an emerging problem to be fixed through human wisdom, prudence and ingenuity, not a disaster needing a dramatic change of direction in response.<sup>205</sup> Development was progress, provided it was done wisely,<sup>206</sup> and indeed in developing countries was necessary, not just to provide a 'decent human existence' but because 'most of the environmental problems [there] are caused by under-development'.<sup>207</sup>

The policy narrative of the Principles, declared in the chapeau to be 'common convictions', was that humans had a (collective) right to enjoy 'an environment of a quality that permits a life of dignity and well-being', but with a corresponding 'solemn responsibility to protect and improve the environment for present and future generations'.<sup>208</sup> The natural resources of the earth, defined broadly to include the air, water, land, flora and fauna and especially

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<sup>199</sup> The official text of these documents is contained in the Report of the Conference, United Nations Conference on the Human Environment, *Declaration of The United Nations Conference on The Human Environment Stockholm, 5–16 June 1992*, UN Doc. A/CONF.48/14/Rev.1, 2–65, and Corr 1 (16 June 1972).

<sup>200</sup> United Nations Conference on the Human Environment, *Action Plan for the Human Environment*, A/CONF.48/14 and Corr 1, chap. II. (15 June 1972), endorsed by GA Res 2994, UN GAOR, XXVII sess, 2112<sup>th</sup> plen mtg. (15 December 1972).

<sup>201</sup> The first 7 substantive paragraphs of the declaration are under a chapeau which takes the form "The United Nations Conference...proclaims that:"

<sup>202</sup> *Stockholm Declaration*, above n 15,[1].

<sup>203</sup> Ibid [3].

<sup>204</sup> Ibid [6], (emphasis added).

<sup>205</sup> Ibid, see [3] and [6] in particular.

<sup>206</sup> Ibid, see [3], [5], [6].

<sup>207</sup> Ibid [4].

<sup>208</sup> Ibid Principle 1.

representative samples of natural ecosystems, 'must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.'<sup>209</sup>

Further:

The capacity of the earth to produce vital renewable resources must be maintained and wherever practicable, restored or improved.<sup>210</sup>

Non-renewable resources should be husbanded 'to guard against the danger of their future exhaustion and to ensure that benefits from such employment are shared by all mankind',<sup>211</sup> while pollution beyond the capacity of the environment to render pollutants 'harmless' should be halted.<sup>212</sup>

The environmental policy paradigm embedded in these principles requires the maintenance of the capacity of nature to provide a reasonable quality of life for each successive generation.<sup>213</sup> Economic and social development are also declared essential for quality of life, but in terms of a freedom to pursue economic welfare within ecological bounds, not the welfare optimisation of the economic paradigms discussed later.<sup>214</sup> Policy integration, in the form of 'an integrated and coordinated approach to ... development planning' and 'rational planning' is required to render development compatible with environmental protection.<sup>215</sup> Although there is no all-embracing principle akin to SD per se, the inclusion of a goal of improving the environment for future generations, in combination with the concept of maintaining the earth's productive capacity, certainly reflect sustainability thinking. Ironically, the Australian delegation to the conference reached the opposite conclusion, briefing the environment minister that:

[I]n substance, the Declaration is a miscellany of injunctions to which individual objection would be difficult to carry in a Stockholm forum. The whole is not greater than the sum of the parts ...<sup>216</sup>

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<sup>209</sup> Ibid Principle 2.

<sup>210</sup> Ibid Principle 3.

<sup>211</sup> Ibid Principle 5.

<sup>212</sup> Ibid Principle 6.

<sup>213</sup> Consistent with the scope of this thesis, this analysis leaves aside principles dealing with international cooperation and issues between developed and developing countries.

<sup>214</sup> *Stockholm Declaration*, above n 15, Principle 8

<sup>215</sup> Ibid, Principles 13 and 14; see also Principle 4 concerning a 'special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat', which requires that 'Nature Conservation, including wildlife, must therefore receive importance in planning for economic development.'

<sup>216</sup> Australian Government, 'Australian Brief Stockholm Conference on the Human Environment, United Nations Conference on the Human Environment, Plenary, Draft Declaration on the Human Environment



### 3.2.2 Weak Sustainability

While Boulding, Georgescu-Roegen and Daly, all economists, had highlighted the centrality of the capital-like qualities of nature at a time of great environmental concern, it was the shock of the oil crisis of the early 1970s, in which major oil producers embargoed the supply of oil to some major economies, that produced a spike in discussion in mainstream economics on the optimal management of exhaustible resources, including over generations.<sup>217</sup> In this discussion several scholars, of whom Solow has been the most influential, went beyond the traditional utilitarian assumptions of economics and examined the application of a concept of intergenerational equity, in this case based on Rawls' 'maximin' principle of a just society.<sup>218</sup>

Under the maximin principle, Rawls posited that persons in an 'original position' of deciding the nature of a society without yet knowing their position in it, would choose to maximise the position of the least advantaged person, because that position might be the one assigned to them. Rawls had hesitated to apply the maximin principle between generations, for theoretical reasons beyond scope here,<sup>219</sup> but Solow examined the implications of doing so, on the rationale of being '*plus Rawlsien que le Rawls*', more Rawlsian than Rawls.<sup>220</sup> Solow began by pointing out that optimal growth theory is 'thoroughly utilitarian in conception'; social welfare is defined narrowly simply by summing individual utility, which brings 'the possibility that a loss of utility to one individual (or generation) can be more than offset by an increment to another'.<sup>221</sup> In other words, in

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(Conference Document 48/4)' (NAA A2539 B1972/51). While the writer takes the view that the Australian delegation brief was incorrect on this point, this may not have been an error but more a representation of the general view of the day. In his retrospective on the Stockholm Conference, the conference Secretary General, Maurice Strong, was critical of 'the inherent dangers and shortsightedness of a purely economic approach and argued for a 'drastically new concept of management is vital', the 'systems concept' or 'ecological concept', a linking together of patterns of organisation and centres of information that might today be described as policy integration: See Maurice F Strong, 'One Year after Stockholm: An Ecological Approach to Management' 51(4) *Foreign Affairs* 690, especially at 702, 703–704. Although Strong was very well placed to draw general conclusions, he did not make it clear whether he saw such wholistic thinking as embedded in the Stockholm Declaration, or a necessary follow-on step.

<sup>217</sup> See the special issue of *The Review of Economic Studies* containing papers from a Symposium on the Economics of Exhaustible Resources, especially Partha Dasgupta and Geoffrey Heal, 'The Optimal Depletion of Exhaustible Resources' (1974) 41 *The Review of Economic Studies* 3; and Joseph Stiglitz 'Growth with Exhaustible Natural Resources: Efficient and Optimal Growth Paths' (1974) 41 *The Review of Economic Studies* 123. In his introduction to this edition Heal described the economics of exhaustible resources as 'burgeoning': see Geoffrey Heal, 'Introduction', Symposium on the Economics of Exhaustible Resources' (1974) 41(1) *The Review of Economic Studies* 1.

<sup>218</sup> John Rawls, *A Theory of Justice* (Oxford University Press 1972).

<sup>219</sup> Ibid 155–156.

<sup>220</sup> R M Solow, 'Intergenerational Equity and Exhaustible Resources' (1974) 41 *The Review of Economic Studies* 29, 30.

<sup>221</sup> Ibid 29. Solow may also have examined the maximin principle because Rawls attacked utilitarianism. Rawls' criticism was based on the argument that utilitarianism may lead to an excessive rate of accumulation,

mainstream economics, optimality is driven by the efficient allocation of resources without regard to equity, including equity between generations, because of the assumption that society could always choose to redistribute the welfare (represented by wealth) so optimised. In contrast, applying the maximin principle as a principle of intergenerational equity, per capita consumption must be held constant through time. This was because optimisation was now based, not on maximising social welfare over time, but on maximising the welfare of the least well-off in each generation: if per capita consumption were higher for one generation over another, then social welfare would be increased by increasing the consumption of that other generation.<sup>222</sup>

Solow concluded that the maximin criterion 'seems to be a reasonable criterion for intertemporal planning decisions'.<sup>223</sup> Of specific relevance here is his conclusion that if substitutability between natural resources, produced capital and labour is assumed, the maximin principle suggests that, for *exhaustible* resources, each generation could draw down the resource pool (optimally), provided it added optimally to the stock of reproducible capital.<sup>224</sup> Under this scenario, constant consumption could be maintained because capital (and thus wealth) would be maintained by substituting one asset for another.

Several years later, Hartwick made explicit what he says was implicit in Solow's paper: investing all net returns from exhaustible resources in reproducible capital (the 'savings-investment rule') will maintain constant consumption and thus implies intergenerational equity (as defined by Solow).<sup>225</sup>

Hartwick subsequently extended his findings to exhaustible resources, concluding that:

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disadvantaging poorer generations to the advantage of later, wealthier generations. This was because the likely capital accumulation and better technology that would likely increase the productivity (ie efficiency) of later generations and thus, under utilitarian principles, suggest a weighting in resource allocation to later generations, would also make later generations better off and reduce their resource needs. Of course, if such an allocation were made and a later generation thus further increased their wealth, it could not be redistributed to an earlier generation as compensation: see Rawls, above n 218, 286–287. See also Kenneth J. Arrow, 'Rawls's Principle of Just Saving' (1973) 75(4) *The Swedish Journal of Economics* 323; Partha Dasgupta, 'On Some Alternative Criteria for Justice Between Generations', (1974) 3(4) *Journal of Public Economics* 405.

<sup>222</sup> Solow, above n 220, 30. Solow ignored some exceptions for 'trick cases'.

<sup>223</sup> Ibid 41. The exceptions to this conclusion were two scenarios not relevant here because they are neither real nor likely to become real. The first scenario was that if an initial capital stock were small then it would prevent that stock from increasing, thus perpetuating poverty. The second was that it seemed to give 'foolishly conservative injunctions' in circumstances of zero population growth and unlimited technical progress, because the technical progress would allow increased consumption.

<sup>224</sup> Ibid.

<sup>225</sup> John L Hartwick, 'Intergenerational Equity and the Investing of Rents from Exhaustible Resources' (1977) 67(5) *The American Economic Review* 972, 973–974. Hartwick also established that the savings-investment rule extends to multiple exhaustible resources: John L Hartwick, 'Substitution Among Exhaustible Resources and Intergenerational Equity' (1978) 45(2) *The Review of Economic Studies* 347.

[I]f current returns from the current net decline in the stock of a renewable resource are allocated to investment in reproducible capital (machines, buildings, etc.) then per capita consumption will remain constant along dynamically efficient paths.<sup>226</sup>

As before, this was on the assumption that inputs were substitutable for one another.<sup>227</sup> Of course this was a purely theoretical result; it took no account of the physical characteristics of the renewable resource, for example that a population might collapse if reduced beyond a certain threshold.

The savings-investment rule is significant because of its recognition of the capital nature of natural resources and thus their centrality to maintaining (ie *sustaining*) the resource flows that are critical to maintaining standards of living. It has practical implications for policy, a prominent contemporary example being the Norwegian Oil Fund, the world's largest sovereign wealth fund, which invests income from the petroleum sector to generate an income stream that will continue after the petroleum resources are exhausted.<sup>228</sup> However, the implications of the rule for environmental policy were not explored for a further decade. With the publication of the Brundtland Report in 1987, intergenerational equity (IGE), the foundational philosophical principle of the savings-investment rule emerged as one the 'twin moral principles' of SD,<sup>229</sup> and thus became a putative principle of global environmental policy. In this light, scholars explored the implications of the savings-investment rule for environmental policy, now identifying it as a sustainability paradigm (sometimes 'Solow-Hartwick sustainability' but here Weak Sustainability (WS)).<sup>230</sup>

### 3.2.3 Emergence of Concept of 'Sustainable Development'

The term 'sustainable development' first emerged onto the global policy stage in 1980 in the *World Conservation Strategy* (WCS), a document commissioned by UNEP and prepared

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<sup>226</sup> John L Hartwick, 'Investing Returns from Depleting Renewable Resource Stocks and Intergenerational Equity' (1978) 1 *Economic Letters* 85.

<sup>227</sup> Ibid.

<sup>228</sup> The formal title of the fund is the Government Pension Fund Global. According to the fund's website, its assets in 2017 exceeded \$US1 trillion: see <<https://www.nbim.no/en/the-fund/market-value>> (viewed 16 March 2018).

<sup>229</sup> Stephen Dovers and John W Handmer, 'Contradictions in Sustainability' (1993) 20(3) *Environmental Conservation* 217, 217.

<sup>230</sup> The term 'weak sustainability' was coined by Barbier, Markandya and Pearce: see for example B Barbier, A Markandya and D W Pearce, 'Environmental Sustainability and Cost-Benefit Analysis' (1990) 22 *Environment and Planning A* 1259. Neumayer uses the term 'substitutability paradigm', to emphasise the central assumption of weak sustainability: Eric Neumayer, *Weak versus Strong Sustainability* (Edward Elgar, 4<sup>th</sup> ed, 2013) 21–23.

primarily by the International Union for Conservation of Nature and Natural Resources (IUCN).<sup>231</sup> Extracts from the Strategy are in Box 3.1.

## WORLD CONSERVATION STRATEGY

...

2. Humanity's relationship with the biosphere (the thin covering of the planet that contains and sustains life) will continue to deteriorate until a new international economic order is achieved, a new environmental ethic adopted, human populations stabilize, and sustainable modes of development become the rule rather than the exception. Among the prerequisites for sustainable development is the conservation of living resources.

3. Development is defined here as: the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life. For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long term as well as the short-term advantages and disadvantages of alternative actions.

4. Conservation is defined here as: the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Thus conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment. Living resource conservation is specifically concerned with plants, animals and microorganisms, and with those non-living elements of the environment on which they depend. Living resources have two important properties the combination of which distinguishes them from non-living resources: they are renewable if conserved; and they are destructible if not.

5. Conservation, like development, is for people; while development aims to achieve human goals largely through use of the biosphere, conservation aims to achieve them by ensuring that such use can continue. Conservation's concern for maintenance and sustainability is a rational response to the nature of living resources (renewability + destructibility) and also an ethical imperative, expressed in the belief that "we have not inherited the earth from our parents, we have borrowed it from our children".

6. Conservation is a process — to be applied cross-sectorally — not an activity sector in its own right. In the case of sectors (such as agriculture, fisheries, forestry and wildlife) directly responsible for the management of living resources, conservation is that aspect of management which ensures that utilization is sustainable and which safeguards the ecological processes and genetic diversity essential for the maintenance of the resources concerned. In the case of other sectors (such as health, energy, industry), conservation is that aspect of management which ensures that the fullest sustainable advantage is derived from the living resource base and that activities are so located and conducted that the resource base is maintained.

<sup>231</sup> See International Union for Conservation of Nature and Natural Resources, 'World conservation strategy: living resource conservation for sustainable development / prepared by the International Union for Conservation of Nature and Natural Resources (IUCN); with the advice, cooperation and financial assistance of the United Nations Environment Programme (UNEP) and the World Wildlife Fund (WWF)' (IUCN 1980) ('World Conservation Strategy'), Preface and acknowledgements. The IUCN has a mixed membership of government agencies and NGOs.

7. Living resource conservation has three specific objectives:

*to maintain essential processes and life-support systems* (such as soil regeneration and protection, the recycling of nutrients, and the cleansing of waters), on which human survival and development depend;

*to preserve genetic diversity* (the range of genetic material found in the world's organisms), on which depend the breeding programmes necessary for the protection and improvement of cultivated plants and domesticated animals, as well as much scientific advance, technical innovation, and the security of the many industries that use living resources;

*to ensure the sustainable utilization of species and ecosystems* (notably fish and other wildlife, forests and grazing lands), which support millions of rural communities as well as major industries

8. Living resource conservation is just one of a number of conditions necessary to assure human survival and well-being, and a world conservation strategy is but one of a number of strategies needed: a strategy for peace; a strategy for a new international economic order; a strategy for human rights; a strategy for over-coming poverty; a world food supply strategy; a population strategy ... All such strategies should be mutually reinforcing. None has much chance of success unless they are. The integration of conservation and development is particularly important, because unless patterns of development that also conserve living resources are widely adopted, it will become impossible to meet the needs of today without foreclosing the achievement of tomorrow's.

...

12. ... While it is inevitable that most of the planet will be modified by people and that much of it will be transformed, it is not at all inevitable that such alterations will achieve the social and economic objectives of development. Unless it is guided by ecological, as well as by other environmental, and by social, cultural and ethical considerations, much development will continue to have undesired effects, to provide reduced benefits or even to fail altogether ... there is a close relationship between failure to achieve the objectives of conservation and failure to achieve the social and economic objectives of development — or, having achieved them, to sustain that achievement. Hence the goal of the World Conservation Strategy is the integration of conservation and development to ensure that modifications to the planet do indeed secure the survival and well-being of all people.

**Box 3.1 Extracts from World Conservation Strategy<sup>232</sup>**

The subtitling of the strategy as 'Living Resource Conservation for Sustainable Development' was apparently to emphasise the need to move beyond a traditional protectionist approach to nature conservation.<sup>233</sup>

While 'sustainable development' was not defined, the narrative of the strategy provided a significant degree of contextualisation and description of what SD requires (see box).

Living resource conservation was just one of a number of conditions necessary for human survival and well-being. Development was defined positively in terms of modifying the

<sup>232</sup> Ibid, 1–2 (footnotes omitted).

<sup>233</sup> Stanley Johnson, *UNEP The First 40 Years: A Narrative* (United Nations Environment Programme 2012) 116.

biosphere to satisfy human need and improve quality of life. For it to be sustainable, it must take account of economic, social and ecological factors, the living and non-living resource base in the context of long- and short-term advantages and disadvantages of alternative actions. This is the concept that would later be described as policy integration. Conservation was defined in terms of maximising benefits to present generations while maintaining the potential of the biosphere to meet the needs and aspirations of future generations: ie as intergenerational equity. Two of the three objectives of 'living resource conservation', the maintenance of essential ecological processes and life-support systems and of genetic diversity, are very close to what would later become the 'ecological principle' of ESD in Australia,<sup>234</sup> and the sustainable utilisation of species and ecosystems, a principle later incorporated into the *Biodiversity Convention*.<sup>235</sup> Finally the narrative argued that the goal of the WCS was the integration of conservation and development to ensure that development secured the survival and well-being of all. If taken out of context, this statement may have been one source of an argument later found in Australian discourse, that sustainability requires no more than weak policy integration, or 'balance' (Policy Tier 2).

The rationale for maintaining ecological processes was that human survival and development depended on them, while the rationale for preserving genetic diversity was one of insurance and investment: to sustain agricultural production, provide a buffer against harmful environmental change, and as raw material for innovation.<sup>236</sup> The rationale for sustainable utilisation was to enable societies to enjoy the benefit of species and ecosystems, on which all were dependent to varying degrees, indefinitely: sustainable utilisation was 'somewhat analogous to spending the interest while keeping the capital'.<sup>237</sup>

The WCS provided an important stepping stone to SD; when the UN General Assembly asked UNEP in 1982 to review progress in the decade since Stockholm and to look at the coming decade, the request was framed in part as a request that UNEP 'continue to promote the concept of sustainable ecological development'.<sup>238</sup> When it reported back, UNEP was then able to propose (and the General Assembly to agree) that the UN set up a

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<sup>234</sup> See below, especially 3.4.1.

<sup>235</sup> See 6.3.1.

<sup>236</sup> IUCN, World Conservation Strategy, above n 231, 5.

<sup>237</sup> Ibid 8.

<sup>238</sup> United Nations, 'Session of a special character of the Governing Council of the United Nations Environment Programme' UN GAOR, A/RES/36/189, 2<sup>nd</sup> Comm, Agenda Item 69 j, UN Doc A36/694/Add.9 (17 December 1981).

special commission to ‘propose long term environmental strategies for achieving sustainable development to the year 2000 and beyond’.<sup>239</sup> The Special Commission took the name World Commission on Environment and Development (WCED).

The WCS was also significant as the first policy template for ensuring that nature was able to continue to provide both the necessities of life and resources to support quality of life more generally. It recommended that countries develop national strategies to implement the WCS.<sup>240</sup> Australia was one of five countries to do so.<sup>241</sup>

### 3.2.4 Nature Conservation Strategy for Australia

Australia announced its intention to prepare a National Conservation Strategy for Australia (NCSA) in 1980.<sup>242</sup> The Government had accepted the principles of the WCS and initiated a participative process that culminated in a National Conservation Strategy Conference, which then submitted a ‘consensus draft’ strategy to government for endorsement.<sup>243</sup> In addition to adopting the definitions and objectives of the WCS, the draft included an

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<sup>239</sup> United Nations Environment Programme, *Report of the Governing Council on its Session of a Special Character*, UN GAOR, 37<sup>th</sup> sess (27 August 1982), UN Doc Supp No 25 (A/37/25), Resolution II, 13<sup>th</sup> mtg, 41.

Somewhat confusingly, this initial resolution was a recommendation only to itself. At its 11<sup>th</sup> meeting, the UNEP Governing Council then resolved by resolution 11/3 to make this recommendation to the General Assembly: see United Nations Environment Programme, *Report of the Governing Council (eleventh session)*, UN GAOR, 38<sup>th</sup> sess, UN GAOR 38/161, 102<sup>nd</sup> plen mtg, Agenda Item 78 g, Supp No 25, UN Doc A/RES/38/25 (19 December 1983); Paragraph 10 of the resolution also referred to the Special Commission as reporting on ‘the environment and the global problematique to the year 2000 and beyond, including proposed strategies for sustainable development’: see Felix Dodds and Michael Strauss, with Maurice Strong, *Only One Earth* (Routledge, 2012) 23.

<sup>240</sup> IUCN, *World Conservation Strategy*, above n 231, section 8, ‘A framework for national and subnational conservation strategies’.

<sup>241</sup> The World Resources Institute reported in 1987 that only 5 countries, Australia, Madagascar, New Zealand, Vietnam and Zambia, had produced a national conservation strategy, although 41 more had acted in some way or were thinking of acting: World Resources Institute and International Institute for Environment and Development, *World Resources 1987* (Basic Books, New York, 1987), quoted in John McCormick, *Reclaiming Paradise: The Global Environment Movement* (Indiana University Press, 1989) 169. Note McCormick’s view that, despite using the terminology of SD, the strategy was ultimately incomplete, too restricted to the narrower IUCN focus on the *natural* world, when it had been clear from the Stockholm Conference in 1972 that the sphere of the human environment should also be included in what should have been a World *Environment* Strategy (at 169–170) [emphasis added].

<sup>242</sup> Malcolm Fraser (Prime Minister), ‘World Conservation Strategy’, *Media Release* 28 September 1980 (Prime Minister, Canberra).

<sup>243</sup> Ibid; Department of Home Affairs and Environment, ‘National Conservation Strategy for Australia: Living Resource Conservation for Sustainable Development, Proposed by a Conference held in Canberra in June 1983’ (AGPS 1983) (‘NCSA’).

additional objective relating to amenity, to 'maintain and enhance environmental qualities which make the earth a pleasant place to live in and which meet aesthetic and recreational needs.'<sup>244</sup> The objectives were qualified by a statement that the role of development was to use resources not only to meet 'essential needs', but also to:

generate economic wealth which enables the community to enhance its standard of living ... and ... to provide economic capacity which helps practise resource conservation which in turn enables sustainable development.<sup>245</sup>

It followed that 'implementation of the Strategy must have regard for the general economic climate ... and for the inability of Australia to isolate itself from the world economic system.'<sup>246</sup>

The Government adopted the NCSA in 1984 in a heavily qualified manner, endorsing the objectives and strategic principles (and thus re-endorsing the objectives of the WCS), but deferring consideration of an implementation strategy to a later date and instead agreeing 'in principle' to a series of 'priority national actions' that would require action ranging from development of environmental standards to investment in research.<sup>247</sup> The implementation strategy did not proceed, due to a loss of enthusiasm by the Government.<sup>248</sup> Although not implemented, the NCSA would regain significance when it was resurrected in 1988 as a divided Cabinet began to scramble for a rational foundation for environmental policy (see 3.2.5).

One significant feature of the NCSA that would resurface in subsequent sustainability policy was the qualification of substantive objectives such as maintaining ecological processes with politically pragmatic and potentially self-contradictory principles of implementation. First, implementation would depend on prosperity, because economic capacity supports resource conservation (ie there was no need to forego growth). Second,

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<sup>244</sup> NCSA, above n 234, 4.

<sup>245</sup> Ibid 4–5.

<sup>246</sup> Ibid 5.

<sup>247</sup> Ibid 19–24; 'National Conservation Strategy for Australia (NCSA) — Endorsement', Cabinet Submission 824, 30 May 1984; decision recorded in Australian Government, *Cabinet Minute* 3379, 18 June 1984 (NAA 13977, 824).

<sup>248</sup> In a 1989 internal minute between senior officers advised that: 'Because of resources constraints the portfolio at the time (sic) and a general lack of enthusiasms at Ministerial level proposed mechanisms, such as the NCSA Advisory Committee, never eventuated': First Assistant Secretary, Natural Environment Division, Department of the Arts, Sport, the Environment, Tourism and Territories, *Minute*, to Deputy Secretary, 17 November 1989 (Department of the Arts, Sport, the Environment, Tourism and Territories file 90/8543).



implementation would depend in part on the world economic system, an oblique reference to requiring equity of contribution from all countries, an issue particularly prominent in later negotiations concerning climate change.<sup>249</sup>

### 3.2.5 Strong Sustainability

Although the term ‘strong sustainability’ did not emerge until the early 1990s, the paradigm can trace its roots to Boulding’s argument that the ‘spaceman economy’ is primarily concerned with stock management. Solow had applied Rawls’ maximin principle in developing what became WS but in 1977 Page had applied the same principle to argue instead that intergenerational justice can be achieved by keeping the resource base intact.<sup>250</sup> However, this would be done not by managing biophysical parameters but by keeping the *prices* of extractive materials constant, a principle he called the ‘conservation criterion’ and which was necessary for a state of ‘permanent liveability’.<sup>251</sup>

In the 1980s a group of economists and ecologists published a set of papers intended to be foundational to an emerging discipline of ecological economics.<sup>252</sup> In one of these papers Pearce argued that Page’s state of permanent liveability was formally equivalent to the ‘sustainability criterion’ from the WCS, but that a sustainability criterion could not be achieved by regulating prices, first because the information requirements necessary for prices to reflect scarcity are immensely complex and second because those prices must incorporate discount rates which will not protect ecosystems if society discounts the future heavily.<sup>253</sup> Pearce proposed instead an ‘ecologically bounded economy’, one that gives each generation equal opportunity of access to the resource base, achieved by imposing biophysical constraints, derived from the first and second laws of thermodynamics, to keep that resource base intact as an endowment for the next generation. The first law implied that:

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<sup>249</sup> NCSA, above n 234, 13. These principles of having regard for the economic climate and taking account of the global context would be included in the IGAE and NSESD, but shorn of the context that identifies the principles as principles of implementation. This is discussed in 3.4 below.

<sup>250</sup> Page, above n 121.

<sup>251</sup> Ibid 185–188, 199–204.

<sup>252</sup> See Inge Røpke, ‘The early history of modern ecological economics’ (2004) 50 *Ecological Economics* 293. The papers were published in a special issue of the journal *Ecological Modelling*.

<sup>253</sup> David Pearce, ‘Foundations of an Ecological Economics’ (1987) 38(1) *Ecological Modelling* 9, 13, 16–17.

the renewable resource use rate should never exceed the regeneration rate. Since the regeneration rate is itself manipulable through managed yield approaches ... [this] should permit steady substitution of renewables for non-renewables.<sup>254</sup>

It also implied that:

Subject to capital embodiment, the rate at which resources are extracted must be equal to or less than the assimilative capacity of the environment to receive the thermodynamic equivalent of the wastes generated.<sup>255</sup>

The rate of resource extraction would thus be limited by either the assimilative capacity of the environment or the regeneration rate of renewables. Recycling could offset these constraints only partially, because the second law of thermodynamics was, in effect, a law of 'the impossibility of total recycling'.<sup>256</sup> Goodland and Ledec reached similar conclusions in their contemporaneous article.<sup>257</sup> This paradigm became known as strong sustainability (SS). Other scholars including Rees, Norgaard, Daly and Costanza have contributed to SS in subsequent years but the fundamentals have not changed.<sup>258</sup>

### 3.2.6 The World Commission on Environment and Development and the Brundtland Report

The Brundtland Report propounded the now famous definition of sustainable development:

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<sup>254</sup> Ibid 14.

<sup>255</sup> Ibid 15.

<sup>256</sup> Ibid.

<sup>257</sup> Robert Goodland and George Ledec, 'Neoclassical Economics and Principles of Sustainable Development', (1987) 38 *Ecological Modelling* 19, 37, 39, 40. Barbier also moved in this direction at this time, those less emphatically, by arguing that 'if the sustainability of the ecological processes underlying economic activity is recognized to have value, then sustainability must explicitly be included' as a policy objective: see Edward B Barbier, 'The Concept of Sustainable Economic Development', (1987) 14(2) *Environmental Conservation* 101, 108.

<sup>258</sup> See for example William E Rees, 'A Role for Environmental Assessment in Achieving Sustainable Development', (1988) 8 *Environmental Impact Assessment Review* 273; Richard B Norgaard, 'Sustainable Development: A Co-Evolutionary View' (1988) 20(6) *Futures* 606; Herman E Daly, 'Toward Some Operational Principles of Sustainable Development' (1990) 2(1) *Ecological Economics* 1; Robert Costanza and Herman E Daly, 'Natural Capital and Sustainable Development' (1992) 6(1) *Conservation Biology* 37; R B Norgaard, 'Sustainability as Intergenerational Equity: Economic Theory and Environmental Planning' (1992) 12 *Environmental Impact Assessment Review* 85.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.<sup>259</sup>

While this formulation broke new ground in encapsulating the development aspirations of the global South and the environmental degradation concerns of the global North in a single concept,<sup>260</sup> Brundtland did not develop a normative theory of intra- or intergenerational justice in support of its approach, making only general references to the common interest and a single reference to moral obligation.<sup>261</sup> Instead, the undoubted legitimacy of SD was built on the WCED's UN mandate; its majority membership from the developing world; on depth of participation, involving deliberative meetings and public hearings in all regions of the world over a period of three years; and ultimately on public acceptance, illustrated by what the Commission's Secretary General later described as 'intense' public support for the Brundtland recommendation to convene a global conference to review action on the report.<sup>262</sup>

Although the Brundtland Report did not propose a normative theory, it did annex proposed legal principles, employing the same basic 'rights and duties' paradigm of the Stockholm Declaration and embodied in a proposed 'universal declaration on environmental protection' (see Box 3.2).

## I. GENERAL PRINCIPLES, RIGHTS AND RESPONSIBILITIES

### *Fundamental Human Right*

1. All human beings have the fundamental right to an environment that is adequate for their health and well-being.

### *Inter-Generational Equity*

2. States shall conserve and use the environment and natural resources for the benefit of present and future generations.

### *Conservation and Sustainable Use*

<sup>259</sup> WCED, above n 7, 43.

<sup>260</sup> Dovers and Hussey characterise the achievement as 'push[ing] as shift in thinking from environment versus development to environment and development': see Dovers and Hussey, above n 42, 9.

<sup>261</sup> Ibid, for example at 46; 57. Others have made the related point that the WCED did not adopt a theory of needs: see Michael Redclift, 'The Meaning of Sustainable Development' (1992) 23(3) *Geoforum* 395, 395.

<sup>262</sup> See Jim MacNeill, 'Brundtland +25; Rio +20' (2014) 44(1-2) *Environmental Policy and Law* 1, 30.

3. States shall maintain ecosystems and ecological processes essential for the functioning of the biosphere, shall preserve biological diversity, and shall observe the principle of optimum sustainable yield in the use of living natural resources and ecosystems.

...

**Box 3.2 Extract from Summary of Proposed Legal Principles for Environmental Protection and Sustainable Development Adopted by the World Commission on Environment and Development Experts Group on Environmental Law<sup>263</sup>**

Further, while Brundtland may have been relatively silent on the normative basis for SD, it contained a strong 'problem-solution' narrative. The future of humanity was threatened by poverty and environmental degradation; not only did this degradation harm the environment but it dampened economic growth.<sup>264</sup> The solution was to adopt a social goal of SD, which meant, among other things, living within the world's ecological means:

[M]any of us live beyond the world's ecological means ... sustainable development requires ... encourag[ing] consumption standards that are within the bounds of the ecologically possible.<sup>265</sup>

This in turn meant that:

The process of economic development must be more soundly based on the realities the stock of capital that sustains it ...<sup>266</sup>

And that:

If needs are to be met on a sustainable basis the Earth's natural resource base must be conserved and enhanced.<sup>267</sup>

The report laid out a general prescription for achieving this goal, based on concepts of maximum sustainable yield for renewable resources; limiting the depletion of non-renewable resources to foreclose as few future options as possible; and maintaining biodiversity and ecosystem integrity.<sup>268</sup> A key implication of this prescription is that substantive policy

<sup>263</sup> WCED, above n 7, 332, 347. The proposed declaration embodied the recommendations of a 'legal experts group', then yet to be published. See J G Lammers and R D Munro, [on behalf of] the Experts Group on Environmental Law of the World Commission on Environment and Development, *Environmental protection and sustainable development: legal principles and recommendations*, (World Commission on Environment and Development, Experts Group on Environmental Law; Graham & Trotman: M. Nijhoff, 1987).

<sup>264</sup> WCED, above n 7, 29–37.

<sup>265</sup> Ibid 43–44.

<sup>266</sup> Ibid 52.

<sup>267</sup> Ibid 57.

<sup>268</sup> Ibid 45–46.

principles such as ecosystem integrity would need to be held together with a policy-integration glue:

In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.<sup>269</sup>

### *The Pathway to Sustainable Development*

No doubt with a view to making SD appealing to governments, Brundtland cast the challenge, not simply as one of living within the earth's ecological means, but as one of reviving growth while changing its quality to conserve and enhance the resource base.<sup>270</sup> That pathway involved not just the adoption of SD as a 'global ethic', but six priorities for legal and institutional change.<sup>271</sup> While space prevents a discussion of these priorities here, the underlying point for domestic policy is that the policy integration required by SD went far beyond an intellectual process; it required radical institutional change under which the proactive maintenance of the environmental resource base would become part of the policy mandate of all agencies, not just environment agencies.<sup>272</sup> A further implication was the need for major investment in restoring that resource base, not just to offset past damage, but to 'catch up with the rising incidence of future damage'.<sup>273</sup>

### *Policy Significance of Brundtland*

Dovers and Handmer argue that the value of SD is its potential for policy integration: issues previously seen as separate, ranging from deforestation and pollution to over-population and poverty, 'are now apt to be considered firmly together in political and

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<sup>269</sup> Ibid 46.

<sup>270</sup> Ibid Annex: 'Tokyo Declaration', 363–366. In a similar vein, in the overview to its report, the Brundtland report envisaged (at 1–2) 'a new era of economic growth', one that 'must be based on policies that sustain and expand the environmental resource base', was conditional on 'decisive political action', for which it offered, '...not a detailed blueprint for action, but a pathway by which the peoples of the world may enlarge their spheres of cooperation.'

<sup>271</sup> Ibid 314 *et seq.* The six priorities were described as 'getting at the sources; dealing with the effects; assessing global risks; making informed choices; providing the legal means; and investing in our future'.

<sup>272</sup> See WCED, above n 7, 310–342.

<sup>273</sup> Ibid 336.

intellectual debates'.<sup>274</sup> They also make the significant point that the Brundtland definition is based on the twin *moral* principles of intergenerational and intragenerational equity.<sup>275</sup> Similarly, Meadowcroft argues that the broad acceptance of SD may have been due the intuitive appeal of the 'fundamental normative idea' of continuing the quest for a better life, while seeking to meet the needs of the poor and taking care not to 'foul the pond' for future generations, which appeared to offer a way out of the 'growth versus environment' polarity of earlier debate.<sup>276</sup> An advantage of moral principles is they are generally based on enduring values of foundational importance to people. As a result, support for a concept that is based on moral principles is more likely itself to endure, in contrast to a simple consensus, which may be transitory. On the other hand, Lafferty and Langhelle argue that a consensus itself has an ethical or moral value, with the result that the widespread appeal of SD was:

[p]ossibly due to the concept's *dual* ethical foundation. By giving expression to both "realist" (natural-law) and "consensualist" (democratic) norms, it can claim support with respect to a broader spectrum of moral imperatives.<sup>277</sup>

The Brundtland Report also attracted significant criticism, especially that the accommodation of environment and development in the form of SD was achieved at the expense of implying that one can 'have one's cake and eat it too'.<sup>278</sup> Criticisms specific to Brundtland are not considered here because the report, despite its great significance, represented an intermediate policy outcome. It was the later global conference and the instruments it generated, including the Rio Declaration (see 3.2.7), that provided authority for any policy paradigm that might be distilled from the broader UN sustainability process. The 'have one's cake and eat it' argument is just one of a number of apparent contradictions in the broader concept of SD that are considered below. Yet one point should be made now: it was not just the Brundtland Report that promoted both development and constraints on development. Despite expressing 'grave concern' that the major cause of the continuing deterioration of the global environment was 'the

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<sup>274</sup> Stephen Dovers and John W Handmer, 'Contradictions in Sustainability' (1993) 20(3) *Environmental Conservation* 217, 217.

<sup>275</sup> Ibid.

<sup>276</sup> James Meadowcroft, 'Sustainable Development: A New(Ish) Idea for a New Century?' (2000) 48 *Political Studies* 370, 371.

<sup>277</sup> William W Lafferty and Oluf Langhelle, 'Sustainable Development as Concept and Norm', above n 86, 1 [emphasis added].

<sup>278</sup> See for example O Langhelle, 'Sustainable Development: Exploring the Ethics of Our Common Future' (1999) 20(2) *International Political Science Review* 129 141.

unsustainable pattern of production and consumption, particularly in industrialized countries', the General Assembly, when convening the Rio Conference and in the *same* resolution, directly linked economic growth with environment protection, affirming:

the importance of a supportive international economic climate conducive to sustained economic growth and development in all countries for the protection and sound management of the environment ...<sup>279</sup>

If the cake argument is valid, there are many who must take responsibility for it.

Two years later, 'deeply concerned by the continuing deterioration of the state of the environment and the serious degradation of the global life-support systems' and 'gravely concerned that the major cause of the continuing deterioration of the global environment is the unsustainable pattern of production and consumption, particularly in industrialized countries', the United Nations, acting on a recommendation in OCF to hold an international conference to promote follow-up action,<sup>280</sup> convened the Rio Conference for 1992, with its central mandate being to:

elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of increased national and international efforts to promote sustainable and environmentally sound development in all countries.<sup>281</sup>

### 3.2.7 The Rio Declaration and Agenda 21

The Rio Conference in 1992 was, at the time, the largest meeting of heads of state or government ever held; well over 100 heads of state or government attended the final session and the conference produced the *Rio Declaration on Environment and Development* and a 500 page implementation plan, Agenda 21, along with conventions on climate change, biodiversity and desertification, and the Forest Principles.<sup>282</sup> As with Brundtland, the

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<sup>279</sup> United Nations, 'UN Conference on Environment and Development', GA Res. 44/228, UN GAOR, 44<sup>th</sup> sess, 85<sup>th</sup> plen mtg, Agenda Item 82f, UN Doc A/RES/44/228 (22 December 1989).

<sup>280</sup> WCED, above n 7, 343.

<sup>281</sup> United Nations, 'UN Conference on Environment and Development', above n 279, [3].

<sup>282</sup> United Nations, 'Declaration of The United Nations Conference on The Human Environment Stockholm, 5–16 June 1992', UN Doc. A/CONF. 48/14/Rev.1 ('Rio Declaration'); United Nations Conference on Environment & Development, *Agenda 21: The United Nations Programme of Action from Rio* (UN 1992) ('Agenda 21'). For an analysis of the conference and its outcomes, see Michael Grubb et al, *The Earth Summit Agreements: A Guide and Assessment* (Earthscan, 1993) 1.

significance of this lies in the authority that this depth of engagement gave to these documents beyond any direct authority they might have as international instruments.<sup>283</sup>

Surprisingly, despite cementing the near-universal acceptance of SD as a social goal, SD was not defined in the Rio documents. It is also surprising, given the significance of the conference, that the Rio Declaration has not proven significant in and of itself. Grubb et al may have identified the reason for this, arguing that although the Declaration was envisaged as an 'Earth Charter', a statement of principles that was to be a 'short, uplifting, inspirational, and timeless expression of a bold new global ethic', it emerged rather as a typical UN lowest common denominator document.<sup>284</sup>

[l]acking a strong central theme...a distillation of the political and conceptual arguments dogging the North-South debate. Far from a timeless epic, it was now a snapshot of history.<sup>285</sup>

In fact, not only does the Rio Declaration lack a central theme; measured against a goal of halting GEDD the document is not an advance over the Stockholm Declaration of 20 years earlier. Recall from 3.1.4 that the Stockholm policy narrative was one of a shared endeavour to maintain the earth's productive capacity. The Rio policy narrative is a more defensive one, that States have the sovereign right to exploit their own resources, qualified by a responsibility to avoid causing environmental harm outside their boundaries and an (obliquely worded) obligation to do inter- and intra-generational equity.<sup>286</sup> However, differences of framing and tone aside, the two declarations share a policy paradigm of development constrained by the need to conserve the Earth's resources to meet the needs of future generations.

The Rio Declaration is significant as a key product of the Rio Conference, embodying a formal, though somewhat oblique, global acceptance of SD as a social goal. The declaration does add to policy in several respects, most notably by including a formal

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<sup>283</sup> The Rio Declaration is not an international convention and has no binding force in international law. There is some support in international law that SD has become a principle of customary international law and in that regard the Declaration might be relevant as evidence of the acceptance by nations of SD as customary international law: see Gillian Triggs, *International Law: Contemporary Principles and Practices* (Lexis Nexis Butterworths 2006), 807, 843.

<sup>284</sup> Grubb et al, above n 282, 94.

<sup>285</sup> Ibid 85.

<sup>286</sup> See *Rio Declaration*, above n 282, Principles 2, 3.



statement of the precautionary principle.<sup>287</sup> However, much of the document consists of rhetoric or restatements of principles from the Stockholm Declaration.<sup>288</sup>

### 3.3 Emergence and Adoption of ESD in Australia

Ecologically Sustainable Development is a uniquely Australian concept, even though this terminology can be found in several international sources.<sup>289</sup> The concept emerged through a combination of global developments — the surge in public concern about environmental issues in the late 1980s that followed in the wake of Brundtland, and Australian federal politics — the need of a government that was showing significant political strains to court the environmental vote with an election looming.<sup>290</sup> Although it developed independently and differs conceptually from SS, the two concepts converge, if not merge, in implementation.

#### 3.3.1 Cabinet Division Over Environment & Development and Emergence of Policy Principles as a Solution

Since its early major initiative to prevent the building of the Franklin below Gordon dam and to legislate for the listing and protection of World Heritage properties,<sup>291</sup> the Hawke Government had not been particularly pro-environmental, adopting the National Conservation Strategy of 1984, modelled on the World Conservation Strategy of 1980, with such heavy qualifications that it had little impact.<sup>292</sup> In the lead-up to the 1987 election the Government adopted a more pro-environmental stance but, being driven primarily by political rather than policy factors, this stance was based on little more than protecting certain high conservation value regions from development.<sup>293</sup> After the election the

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<sup>287</sup> *Rio Declaration*, above n 282, Principle 15. Note that the term ‘precautionary principle’ is used, the terminology in Principle 15 is ‘precautionary approach’.

<sup>288</sup> For example, Principle 13 of the *Stockholm Declaration* and Principle 4 of the *Rio Declaration* both deal with policy integration; Principle 11 of the *Rio Declaration*, dealing with effective legislation, is derivative of general principles concerning effective law-making.

<sup>289</sup> See for example Lynton K. Caldwell ‘Political Aspects of Ecologically Sustainable Development’ (1984) 11(4) *Environmental Conservation* 299.

<sup>290</sup> This was before the advent of The Greens party.

<sup>291</sup> See *Commonwealth v Tasmania* (1983) 158 CLR 1; *World Heritage Properties Conservation Act 1983* (Cth) (repealed).

<sup>292</sup> Australian Government, ‘National Conservation Strategy for Australia (NCSA) — Endorsement’, Cabinet Submission 824, above n 247.

<sup>293</sup> Blanche d’Alpuget, *Hawke: The Prime Minister* (Melbourne University Press 2010) 160–161; 251. The regions were the Tasmanian forests; the wet tropical forests of Queensland; Kakadu National Park Stage II; and Shelburne Bay (sand mining).

originator of this new stance, Graham Richardson, now Environment Minister, pressed for further 'one-off forays', or 'icons' as they were described by several of those intimately involved.<sup>294</sup> This frustrated ministers with economic portfolios to the point of changing Cabinet dynamics.<sup>295</sup>

By this time, the Brundtland Report had been published. To coincide with its launch in Australia, the environment department briefed Minister Richardson to approve a media release welcoming the report and to note 'the action being taken on the Report by the Department'.<sup>296</sup> Surprisingly, this initial briefing was low key, conveying the message that, while the report was wide-ranging and still under examination, '[m]any of the ideas put forward in the report are not new and some have already been acted upon, in part at least, by the Government'.<sup>297</sup> A later, more detailed brief was also low key, recommending that Richardson raise in Cabinet, not the adoption of SD, but the report's recommendations for policy integration. The department saw it as having machinery of government implications:

the proposition that the ecological dimensions of policy must be considered at the same time — on the same agendas and in the same institutions — as the economic, trade, energy, agricultural and other dimensions.<sup>298</sup>

Richardson decided not to do so, for reasons not recorded.<sup>299</sup>

At about this time, Primary Industries Minister John Kerin, frustrated with the lack of a rational policy behind what was by then a series of 'pro-environment' decisions, took his

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<sup>294</sup> Phillip Toyne, writing in Phillip Toyne and Simon Balderstone, 'The Environment' in Susan Ryan and Troy Bramston (eds), *The Hawke Government: A Critical Retrospective* (Pluto Press 2003) 180; Craig Emerson, *The Boy from Barradine* (Scribe, 2018) 182.

<sup>295</sup> Neal Blewett, 'The Hawke Cabinets' in Susan Ryan and Troy Bramston (eds), *The Hawke Government: A Critical Retrospective* (Pluto Press 2003) 86; see also Graham Richardson, *Whatever it Takes* (Bantam Books 1994) and John C Kerin, *The Way I Saw It; the Way It Was: The Making of National Agricultural and Natural Resource Management Policy* (Analysis and Policy Observatory, 2017).

<sup>296</sup> Department of the Arts, Sport, Environment, Tourism and Territories, 'World Commission on Environment and Development (WCED) Report "Our Common Future"', Brief 3462 of 12 October 1987, (Department of the Arts, Sport, Environment, Tourism and Territories file 88/01050). The brief was annotated 'agree' by the minister on the same date.

<sup>297</sup> Ibid [5].

<sup>298</sup> Department of the Arts, Sport, Environment, Tourism and Territories, 'Report of the World Commission on Environment and Development', Brief 3462 of 21 April 1988 to Minister Richardson, (Department of the Arts, Sport, Environment, Tourism and Territories 88/06295). The brief also recommended that Richardson take certain other issues arising from OCF to Cabinet, notably issues associated with Antarctica.

<sup>299</sup> Department of the Arts, Sport, Environment, Tourism and Territories, 'ESD — Policy Aspects', 'Handwritten Minute', (Department of the Arts, Sport, Environment, Tourism and Territories file 88/5264). A separate handwritten note on folio 27 recorded oral advice of 20 July 1988 that the Minister would prefer to respond to the report in a speech.

frustrations to Cabinet at the end of 1987, arguing that existing processes for considering conservation and development proposals were characterised by a lack of consistency and frequent requirements for:

eleventh hour *ad hoc* responses to proposals ... (both within and outside Governments), minimal recognition of the multiple objectives involved in resource allocation decisions and a propensity for parties to seek 'winner take all outcomes' without understanding economic, social or environmental consequences.<sup>300</sup>

Kerin persuaded Cabinet to direct that he and Richardson develop options for 'rationalising and improving' the policy framework for decisions on competing land uses, taking into account the policy principles embodied in the long-dormant NCSA, which 'emphasise that a balance between conservation and development is essential'.<sup>301</sup> Kerin also read the Brundtland Report during this period and began promoting SD as a potential basis for policy-making as he 'saw that this could be a way to reconcile competing arguments on environmental management'.<sup>302</sup> The subsequent joint Cabinet submission from Kerin and Richardson referred to SD, but, rather than proposing SD as a social goal, recommended that a set of 47 objectives and principles identified by officials, mostly from unspecified sources, be endorsed and publicly promoted as a guide to Ministers in resolving conflicting land-use claims. At the head of the list, 'notably', were three principles of policy integration, benefit optimisation and sequential use, discussed below.<sup>303</sup>

Cabinet endorsed the principles as recommended.<sup>304</sup> Despite the decision to 'publicly promote' the principles, when the Prime Minister announced the decision he mentioned only the three 'notable' principles (see Box 3.3). Further, it was only these three that were enacted to 'guide' the Resource Assessment Commission (RAC), a body the Government decided to establish as part of the same decision. (Hereafter, the 'notable' principles are 'the RAC Principles'.) The role of the RAC, modelled on the (then) Industries Assistance Commission — a statutory authority which gave independent advice to government on support for domestic industry — was to hold inquiries under references from government

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<sup>300</sup> Australian Government, 'Conservation/heritage areas and resource assessment-development', *Cabinet Submission 5466*, endorsed in *Cabinet Minute 10619*, 15 December 1987 (NAA: A14039, 5466) 3.

<sup>301</sup> *Ibid*, *Cabinet Minute 10619*. The NCSA is discussed in 3.2.3.

<sup>302</sup> See Kerin, *The way I saw it; the way it was: The making of national agricultural and natural resource management policy*, above n 295, 538.

<sup>303</sup> Australian Government, 'Conservation-heritage areas and resource assessment-development' *Cabinet Submission 5466*, above n 300, 7–8, Appendix B (emphasis added).

<sup>304</sup> *Cabinet Minute 10619*, above n 300, 2–4.

on major conservation and resource development issues and then to advise government according to the terms of reference.<sup>305</sup>

#### CABINET MINUTE

....

The Cabinet agreed:—

- (a) that the policy principles as set out [in] ... the Report of the Interdepartmental Committee on Conservation/Heritage and Resource Assessment/Development ... be endorsed and publicly promoted as a guide to Ministers in resolving conflicting land use claims, notably that:—
    - i) there should be an integrated approach to conservation and development by taking both conservation and development aspects into account at an early stage;
    - ii) resource use decisions should seek to optimise the net benefits to the community from the nation's resources, having regard to efficiency of resource use, environmental considerations and an equitable distribution of the return on resources; and
    - iii) Commonwealth decisions, policies and management regimes may provide for additional uses that are compatible with the primary purpose values of the area, recognising that in some cases both conservation and development interests can be accommodated concurrently or sequentially, and, in other cases, choices must be made between alternative uses or combinations of uses;
- ...

**Box 3.3 The 'Notable' or 'RAC' Principles Endorsed by Cabinet to Guide Ministers in Resolving Conflicting Land Use Claims** (later substantially enacted as guidance to the Resource Assessment Commission under *Resource Assessment Commission Act 1989* (Cth) (repealed))

Of the three RAC principles, the first calls for policy integration. The second seems directed primarily to the welfare-economics approach of determining resource-use optimality, although the formulation is ambiguous in referring to environmental and equity considerations, firstly because environmental considerations should already have been taken into account as externalities in assessing efficiency of resource use, and secondly because there are no settled principles as to the weighting that might be given to equitable considerations in modifying an outcome based on efficiency.

The third principle appears to be directed to minimising the need for trade-offs by promoting the possibility of accommodating both exploitation and conservation of resources. The interdepartmental committee that formulated the principle for Cabinet did

<sup>305</sup> Australian Government, 'Conservation/Heritage and Resource Assessment/Development', *Cabinet Submission 6124*, 2 November 1988; decision recorded in *Cabinet Minute 12025 (Amended)*, 15 November 1988 (NAA 14039, 6124); *Resource Assessment Commission Act 1989* (Cth) (repealed) s 7 and sch 1. There were minor differences in wording between the principles as agreed by Cabinet and as enacted.

not provide an analysis but simply explained that there was a ‘minimal recognition of the multiple objectives involved in resource allocation decisions and a propensity for parties to pursue winner take all outcomes ...’<sup>306</sup> The principle may thus have been an attempt by officials to respond to political division by, at best, emphasising potential middle ground, but at worst, promoting self-deception. Where sequential use really is possible, as it might be for example in rehabilitating a mine-site with native vegetation, the principle is a statement of the obvious. To the extent that the principle implies that compromise is not necessary, for example that a mine-site could be cleared of critical habitat for a threatened species and later returned to its previous condition without enduring loss, the principle implies falsely that hard decisions can be avoided.

The full set of 47 principles is reproduced in Appendix 3. They are not explored in detail here because they were not announced (despite Cabinet’s decision to do so) and appear not to have been applied;<sup>307</sup> they were in any event overtaken the following year by the ESD process described below.<sup>308</sup> It is sufficient to note that they would have been difficult to apply coherently, due to the sheer number of principles and to inconsistency and ambiguity among them. Further, apart from several headings, the report from officials containing the principles did not include a theoretical framework; it simply listed the principles ‘developed’ by officials and ‘considered relevant’ to land-use decisions.<sup>309</sup> This no doubt reflected that process of preparing the resulting joint submission was ‘long and difficult’.<sup>310</sup>

### 3.3.2 The 1989 Environment Statement

In May 1989 Prime Minister Hawke decided to make a statement on the environment, taking advantage of a rare confluence of circumstances. First, two peak national farming and conservation organisations, usually seen as representing antithetical interests, had made a joint submission to the Government proposing a national land management program, providing an opportunity for consensus politics. Second, environmental initiatives

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<sup>306</sup> Interdepartmental Committee on Conservation/Heritage Areas and Resource Assessment/Development, ‘Conservation/Heritage Areas and Resource Assessment/Development: Report of IDC’ (Department of the Arts, Sport, the Environment, Tourism and Territories file 88/3076) 4.

<sup>307</sup> The writer has found no reference to these principles in official records subsequent to the Cabinet decision endorsing them.

<sup>308</sup> *Cabinet Minute 10619*, above n 300, 2–4.

<sup>309</sup> IDC Report, 8.

<sup>310</sup> Graham Richardson, Letter to Senator the Hon Peter Walsh, Minister for Finance, dated 26 October 1988 (PM&C File CA3287). Unusually, no doubt reflecting an inability to agree, the joint submission even included some inconsistent individual recommendations, cast as alternatives.

remained popular: the Labor Party's pollster was advising that 'whenever we mention the environment our vote goes up'.<sup>311</sup>

### *Drafting the Statement*

The files reveal a series of draft statements. Although the first draft was produced by officials from several agencies, it appears that most subsequent drafts were developed simply by iterating them between the Department of Prime Minister and Cabinet (PM&C) and the Prime Minister's Office (PMO); some drafts bear annotations apparently from officials in PM&C or political advisers in the PMO, while the authorship of others is unclear. Hawke did commence a Cabinet process by writing to ministers, but this was apparently abandoned, as the final statement was endorsed by Cabinet 'without submission', suggesting that if any document was circulated to ministers, it was only the draft statement itself.<sup>312</sup>

The first draft opened with a 'theme' rather than a goal of intergenerational equity:

We have a responsibility to pass on to the children of our generation a world which has been enriched — and certainly not reduced — by our existence.<sup>313</sup>

Consistent with the 1988 decision, the draft simply reiterated the three RAC principles and the NCSA-derived policy principles.<sup>314</sup> The stronger draft of 29 May specified SD as the Government's 'Objective' and began to elaborate on that term, while by 15 June a departmental brief to the Prime Minister canvasses the use of an environmental qualifier to SD:

We assume that you would want to explicitly endorse the concept of environmentally sustainable development.<sup>315</sup>

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<sup>311</sup> Phillip Toyne (Australian Conservation Foundation) and Rick Farley (National Farmers' Federation), 'National Land Management Program', Submission to Government, (PM&C file 89/2499, Part 1); Craig Emerson, (Economic Adviser to the PM), 'Meeting with Graham Richardson on Environmental Strategy', Memorandum to Prime Minister, 8 March 1989 (PM&C file 89/2499, Part 2).

<sup>312</sup> See Prime Minister, (PM&C file 84/2499, NAA) and similar letters of the same date to several other ministers; 'Prime Minister's statement on the environment — Without Submission' *Cabinet Minute 12825* (NAA A13979, 12825).

<sup>313</sup> Department of the Prime Minister and Cabinet, 'First Draft — Prepared by Departments for Discussion Only: Prime Minister's Statement on Environmental Issues' (PM&C file 89/2499, Part 1) 1.

<sup>314</sup> Ibid.

<sup>315</sup> Department of the Prime Minister and Cabinet, 'Outstanding Issues Relating to the Environment Statement', Brief to the Prime Minister, 15 June 1989 (NAA A1209 2499, Part 2).

This language implies that officials were seeking confirmation of discussions with political advisers.

At this point Minister Richardson wrote to the Prime Minister, apparently (and surprisingly, given the Cabinet divisions discussed above) out of concern that the statement would lack policy substance. He provided a suggested outline of the statement that included several references to sustainability concepts, including that development be ‘ecologically sustainable’. Even more surprisingly, Richardson urged hard decisions (see Box 3.4).

My dear Prime Minister

Before you depart for Europe I would like to raise with you my concerns about the content and focus of your environment statement.

At a time when public interest in the environment is at a peak I am concerned to ensure that your Statement on the Environment does more than cover old ground. Any Statement which does little more than identify environmental issues, list existing Government programs and flag some areas where funding will be directed in the next financial year will achieve little.

Increasingly concerned Australians ... will be expecting a much more forward looking and innovative approach than the typical incrementalism and that the Government needed to address hard and controversial issues.

...

The future will require some sacrifice on the part of individual Australians because continued protection of the environment ... will mean a more considered approach to resource and energy use.

If we are to convince the electorate that we are serious about protecting the environment I consider that the statement will need to address hard and controversial issues in some way.<sup>316</sup>

Yours sincerely

GRAHAM RICHARDSON

**Box 3.4 Extracts from Environment Minister's Letter to Prime Minister**

Richardson went on to suggest the Government consider increased Commonwealth power through constitutional change; policy integration including through resource accounting; ‘fiscal measures’ (presumably taxes) to encourage environmentally sound management by both public and private sectors; and that ‘sufficient resources are mobilised in a

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<sup>316</sup> Graham Richardson, Minister for the Arts, Sport, the Environment, Tourism and Territories, Letter to Prime Minister Hawke, 15 June 1989 (NAA 1209 2499, Part 2).

coordinated way', ie significant budget decisions beyond the small increases that Cabinet had already approved to support the statement; and a 'commitment to being ecologically sustainable' through policies and strategies, including through sectoral strategies similar to the then-mooted national forest strategy.<sup>317</sup> The Prime Minister did not act on the advice to address hard decisions but some aspects of the finalised statement do correspond to some of Richardson's suggestions.<sup>318</sup>

In the meantime, the brief of 15 June was returned to the department with annotations, including the word '(ecologically)', adjacent to the phrase 'environmentally sustainable development'. This is at least consistent with Balderstone and Toyne's claim that political advisers added the 'ecological' to SD, despite objections from officials, because SD had become 'all things to all people and an excuse for any sort of action or non-action'.<sup>319</sup> Kerin simply records that the decision to add the word 'ecological' was taken in Cabinet,<sup>320</sup> but irrespective of the exact sequence of events the evidence points to the adoption of ESD as a policy goal as being politically driven, not policy driven, without any formal analysis of the meaning of the concept or implications of adopting it. In the same vein, annotations on different drafts, some of unclear authorship, suggest a focus on political tone rather than on policy substance as evidenced by this annotation, probably from the PMO:

You sound pretty sensitive about any perception that we might sacrifice growth for the environment: statement needs to be visionary, not hard-nosed economic rationalist. It is a question of tone.<sup>321</sup>

A subsequent drafting annotation, its typewritten form as part of a draft suggesting that its author was an official, attempts to respond to this but also seems somewhat confused:

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<sup>317</sup> Ibid.

<sup>318</sup> One draft reveals officials as contemplating substantive measures to follow a policy cycle of measure-monitor-adjust, including by one of the approaches suggested by Richardson, that of resource accounting, but this predated Richardson's letter and, like some elements of Richardson's letter, appears to have been motivated by a desire to ensure consistency with previous ministerial statements rather than the need to translate policy into on-ground outcomes: See PM&C file 89/2499 Part 1 (NAA 1209 2499, Part 1). The note does not record which minister made statements to this effect, or in what context. The file note predates the Minister's letter, but the alignment between the two documents may arise from Environment Department officials providing an advance copy of Richardson's letter.

<sup>319</sup> Toyne and Balderstone, above n 294, 180. The advisers said to be responsible for this action were Simon Balderstone and Craig Emerson. Richardson's letter had suggested the term ESD but it is unclear whether this was drafted by officials or political advisers.

<sup>320</sup> Kerin, above n 295, 538.

<sup>321</sup> PM&C file 89/2499 Part 1 (NAA 1209 2499, Part 1).

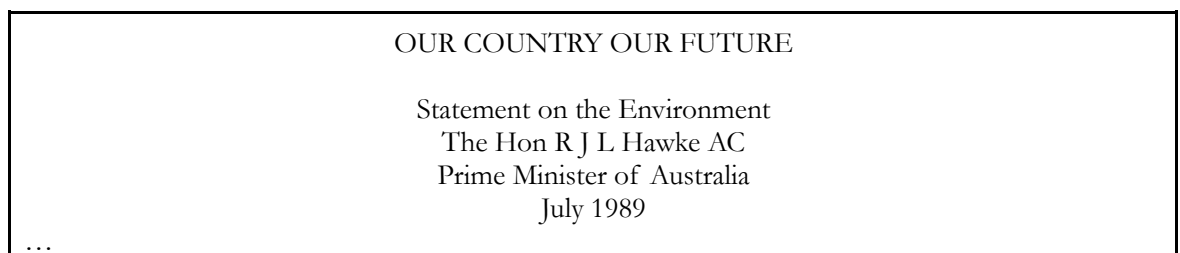


These principles have been taken from the UN's Man and the Biosphere program. The source should be identified and their importance to maintaining future development options and preserving the quality of life to be enjoyed by future generations of Australians emphasised. That is, the concept of environmentally and economically sustainable development needs emphasised [sic]. The statement needs to be both visionary and hard-nosed rationalist — this is a matter of tone.<sup>322</sup>

It seems unlikely that the 'Man and the Biosphere' program was the source of sustainability principles as that program was oriented to scientific research and the establishment of biosphere reserves and the draft already included the NCSA and RAC principles.<sup>323</sup> Later still, an annotation directed the drafter 'not too much on principles — they end up as meaningless motherhood crap'.<sup>324</sup> While the record is incomplete and at times unclear, what is clear is that this highly abbreviated process left some significant loose policy ends trailing from a major commitment.

### *The Statement*

The finalised statement, 'Our Country, Our Future' (the 1989 Statement) cast the problem in stark terms of an urgent need to cease squandering the Earth's assets to ensure a viable future for our children, not only for utilitarian reasons but for the intrinsic value of nature. (See Box 3.5 for this narrative.)<sup>325</sup> In responding to this need, the statement rejected a 'no growth' option, as most Australians put a high value on economic development and growth. There was no need to make a 'stark choice' between the environment and growth because, as the Brundtland Report had pointed out, humans could meet the needs of the present without compromising the needs of future generations by living within the productive capability of the environment. The Government thus recognised that environmental aspects were integral to economic decisions and committed itself to the principle of ESD.



<sup>322</sup> Draft Statement dated 6 June 1989, PM&C file 89/2499, Part 1, folio 110.

<sup>323</sup> See Michel Batisse, 'The Biosphere Reserve: A Tool for Environmental Conservation and Management' (1982) 9(2) *Environmental Conservation* 101.

<sup>324</sup> NAA A1209, 2499, Part 1, f 115.

<sup>325</sup> R J L Hawke, 'Our Country Our Future: Statement on the Environment' (AGPS 1989).

The threat posed by continuing environmental degradation is no longer hypothetical ...

We have little time to spare ...to proceed with ignorant and unthinking ways risks further irreparable damage.

We cannot continue to squander the Earth's assets. If we are to leave a viable future for our children we must better understand the planet, and make a conscious decision to protect and live in harmony with it.

...

Preservation of the environment should be underpinned by more than just human-centred survival or economic or aesthetic considerations. While plants and animals are useful ... [they] have intrinsic value ...

...

Yet all reasons point to the same conclusion — the environment is critical and ... greater efforts are needed to protect it.

...

Most Australians put a high value on economic development and growth, so that everyone in the community can enjoy a better standard of living.

A 'no growth' policy may have attractions for some who are fortunate enough already to enjoy a comfortable standard of living. It is not a policy which is likely to be favoured by those who have difficulty in meeting their basic needs ...

...

As the World Commission on Environment and Development ... has pointed out, we have the ability to make development ecologically sustainable. The task is to ensure that we meet the needs of the present without compromising the ability of future generations to meet their needs.

... When decisions on economic developments are being made, full weight must be given to the costs to society of proposed activities, as well as the benefits.

Ecologically sustainable development means economic growth that does not jeopardise the future productive base. Renewable resources are managed so that they are not permanently depleted ...

...

Decisions of this kind ... are a recognition that our quality of life, and that of future generations, depends on living within the productive capability of our environment.

**The Australian Government recognises the fundamental link between economic growth and the environment. It recognises that environmental aspects are an integral part of economic decisions. It is committed to the principle of ecologically sustainable development.**

**Box 3.5 Extracts From 'Our Country Our Future', Statement by Prime Minister Hawke<sup>326</sup>**

The Government 'continue[d] to endorse' the four objectives from the NCSA, and reiterated the three RAC principles,<sup>327</sup> without the statement adverting to the differences of approach they represented. However, if ESD is taken to be the overriding social goal, the statement can be read coherently and consistently with SS, as endorsing a paradigm of

<sup>326</sup> Ibid, 2, 3, 4 (original emphasis).

<sup>327</sup> Ibid 4–5.

maximising economic welfare subject to ecological constraints to ensure that the productive capacity of nature is maintained.

### 3.3.3 The ESD Process

Minister Kerin might have taken satisfaction that his attempt to ensure that environment and development decisions were made on a rational policy basis had led not only to the establishment of the RAC and adoption of the 1988 policy principles, but had been followed by the commitment to, and elaboration of, ESD in Hawke's statement. Yet this was clearly not the case. Later in 1989, Kerin and Resources Minister Cook sought to drive policy rationalism further, writing to the PM advising of their intention to 'fully implement the concept of sustainable development' for natural resource industries and proposing a national response to the Brundtland Report.<sup>328</sup> If this was an attempt to force Cabinet's hand by threatening unilateral action within their portfolios, it worked. Hawke subsequently agreed that they bring the proposal before Cabinet.<sup>329</sup>

The ensuing Cabinet memorandum from Kerin's and Cook's department argued that in the context of public debate over the need for both economic development and conservation, resource industries had lost 'the confidence necessary to continue to expand their productive base' and were:

now loudly asking that the Government give a clearer direction to both environmental and development strategies in Australia. They want better planning and decision-making.<sup>330</sup>

At the same time, there was not:

the necessary awareness within the resource based sector that its productive base depends importantly on its environmental and ecological capital. Importantly, there is a clear need to increase awareness in this sector that this capital must be protected and enhanced such that economic development can be sustained in the long term.<sup>331</sup>

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<sup>328</sup> John Kerin and Peter Cook, Letter to Prime Minister Hawke, 7 November 1989 (Environment Department file 90/8543).

<sup>329</sup> Australian Government, 'National Strategy for Sustainable Development' *Cabinet Memorandum 6899*, 29 November 1989 (NAA: A14039, 6899) 5.

<sup>330</sup> Australian Government, 'National Strategy for Sustainable Development' *Cabinet Memorandum 6899*, 29 November 1989; decision recorded in *Cabinet Minute 13463*, 12 December 1989 (NAA: A14039, 6899) 2. Note that there was one department serving two ministers.

<sup>331</sup> Ibid.

Despite the Government having committed to ESD in the 1989 Statement, ESD had not been defined, 'nor do we have a conceptual policy framework on which to deal with development and conservation issues'.<sup>332</sup> A national strategy was needed:

The ultimate objective is to rigorously define ecologically sustainable development and its implications for specific industries, prioritise the targets and issues involved and set out a timetable for action over the 1990s that has the full commitment of the groups involved.<sup>333</sup>

Cabinet agreed to develop a 'National Strategy for Sustainable Development', later called the 'National Strategy for Ecologically Sustainable Development' (NSESD) through a process involving the preparation of a discussion paper on the concept of SD, and, 'once that concept has been well articulated', to establish 'working groups' to consider 'the practical application of that concept'.<sup>334</sup> Ignoring the definition of ESD in Hawke's statement, Cabinet decided to cast the net widely in seeking to define ESD, agreeing that 'the concept of [ESD] be defined and applied as far as possible to all industries and environmental issues'; it also asked officials to identify 'related current or intended exercises on the definition of [ESD] and its achievement in practical terms'.<sup>335</sup>

The NSESD is considered as a case study in chapter five, but in the course of that process the government grappled with the meaning of ESD and adopted 'principles of ESD' in several forms. This aspect of what was also called 'the ESD process' is discussed here.

### *ESD Discussion Paper*

The Government published its ESD Discussion Paper in June 1990. Although an intermediate document that was overtaken by subsequent developments, it is discussed in detail here because it contains the only official discussion of ESD principles, not only in a public document but in Cabinet documents as well.<sup>336</sup> It thus provides the only significant source of insight into the policy thinking.

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<sup>332</sup> Ibid.

<sup>333</sup> Ibid 3.

<sup>334</sup> Australian Government, *Cabinet Minute 13463*, above n 330, paras 2(c), 2(e)(iii).

<sup>335</sup> Ibid paras 2(a), 2(e)(i).

<sup>336</sup> This issue is discussed in 3.4.1.

Despite Cabinet's decision to define ESD and its request for advice on related exercises, the memorandum bringing forward the draft discussion paper glossed over these matters, advising Cabinet that:

There have been a great many attempts to define sustainable development both in Australia and elsewhere. Work is proceeding in international forums including the OECD and UN agencies and a considerable literature is being built up. This paper has not attempted to list comprehensively current work ... But the discussion paper draws extensively on key ideas and principles elaborated in earlier work ...<sup>337</sup>

There is thus no explanation as to why the draft discussion paper did not simply call up the 1989 Statement or why it relegated something as fundamental as the definition of ESD to the (untitled) preface, while proposing five principles of ESD in the body of the paper (see Box 3.6).

**ECOLOGICALLY SUSTAINABLE DEVELOPMENT**  
A Commonwealth Discussion Paper

*Ecologically sustainable development means using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.*

...

[Table of Contents and Introduction]

...

**2. GENERAL PRINCIPLES OF ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

10. The Government considers that the following five general principles are key elements of ecologically sustainable development:

- Integrating economic and environmental goals in policies and activities
- Ensuring that environmental assets are appropriately valued
- Providing for equity within and between generations
- Dealing cautiously with risk and irreversibility
- Recognising the global dimension

**Box 3.6 Extracts from ESD Discussion Paper Concerning Definition and Principles of ESD** <sup>338</sup>

It went on to elaborate on the principles (discussed in 3.4) but their origin and connection to the goal of ESD is not identified; Cabinet was simply given the desultory advice that the paper 'discusses some general principles that might inform the development of a

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<sup>337</sup> Australian Government, *Cabinet Memorandum 7136*, 'Ecologically Sustainable Development: Discussion Paper, Process and Work Program 1990–1991'; decision contained in *Cabinet Minute 13862*, 25 June 1990 (NAA A14039, 7136) 2. Note that, again, the Environment Department did not provide a coordination comment.

<sup>338</sup> Commonwealth of Australia, *Ecologically Sustainable Development: A Commonwealth Discussion Paper* (AGPS 1990) untitled preface, 2.

sustainability strategy'.<sup>339</sup> This is significant because, as discussed in chapter seven, in a legislative context most of these principles, intended to *inform the development* of strategy to advance the goal of ESD, would come to *substitute* for the goal itself, resulting in a loss of clarity about policy intent.<sup>340</sup>

The policy narrative of the discussion paper as published in 1990 was confused. The definition of ESD clearly aligns with Policy Tier 5.3, which would suggest that a key task is to identify biophysical constraints. However, the introduction adopts a relativist tone closer to the 'policy integration' model (Tier 2). The policy task was 'to take better care of the environment while ensuring economic growth, both now and in the future', with ESD:

provid[ing] a conceptual framework for integrating these economic and environmental objectives so that products, production processes and services can be ... both internationally competitive and more environmentally compatible.<sup>341</sup>

The discussion paper then elaborates on the five principles. The narrative, summarised below, changes to imply the pursuit of economic efficiency (Policy Tier 3).

#### Integrating economic and environmental goals in policies and activities

The narrative is that economic growth and environment can often be pursued simultaneously, if an 'integrated approach' is taken, which uses resources efficiently, but there will be some cases where economic and environmental goals are incompatible, in which case 'the choices will be clearer if they are based on the best available information and assessment of the full costs and benefits of alternative courses of action'.<sup>342</sup> The underlying sentiment is to pursue welfare economics as far as possible, regarding any choice for environmental over economic values as an exceptional decision to pursue non-financial preferences rather than adopt ecological constraints generally.<sup>343</sup>

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<sup>339</sup> *Cabinet Memorandum 7136* and *Cabinet Minute 13862*, above n 337 2.

<sup>340</sup> An accompanying memorandum from Treasury confined itself to the implementation issue of 'how "best" to match policy instruments with policy objectives'; Cabinet directed that it be published, effectively making it an information paper on policy tools relevant to ESD: see *Cabinet Minute 13862*, 25 June 1990, endorsing *Cabinet Memorandum 7128*, 'Economic and Regulatory Measures for Ecologically Sustainable Development: Strategies' (NAA A14039, 7128). The memorandum was subsequently published as 'Economic and Regulatory Measures for Ecologically Sustainable Development Strategies' in Department of the Treasury, *Economic Roundup: June 1990* (AGPS 1990) 6.

<sup>341</sup> Australian Government, *Ecologically Sustainable Development: A Commonwealth Discussion Paper* (AGPS 1990), ('ESD Discussion Paper') 1.

<sup>342</sup> *Ibid* 3–4, especially at 4.

<sup>343</sup> *Ibid*.

Ensuring that environmental assets are appropriately valued<sup>344</sup>

Again, the approach here is one of welfare economics, implying that the task is to ‘get the price right’ by valuing environmental inputs rather to recognise biophysical constraints, and to see limits on the ability to place an economic value on resources (in which case governments need to ‘arbitrate’, ie make a choice based on values rather than price) as an exception.

Providing for equity within and between generations

This section acknowledges that IGE requires that the needs of future generations be incorporated into today’s decisions, to at least maintain future standards of living. However, as if this is too harsh a standard, the text then canvasses various reasons why this standard may not require significant departures from conventional approaches, because of sequential uses, technological improvements, acceptable short-term or localised reductions in natural stock, and substitution of (manufactured) capital for natural assets. In the latter case, if prices reflect environmental values, ‘it is doubtful whether these limits will be crossed’.<sup>345</sup> Finally, ‘environmental preservation cannot be pursued exclusively’, without regard for impacts on the present generation, including on employment, indebtedness, interest rates and inflation; some of these factors had intragenerational implications, such a greater impacts on low-paid workers.<sup>346</sup> The narrative then returns to consistency with the goal of ESD, arguing that future generations should not be saddled with debt, whether environmental or economic.<sup>347</sup>

This narrative is ambivalent: while it acknowledges the need to depart from mainstream approaches (welfare economics) to do equity to future generations, it also downplays the likelihood that this will be necessary in practice, because if resources are properly priced, most of the work will be done. The solution is a *non sequitur*, to satisfy all policy objectives simultaneously:

The task, therefore, is to integrate ecological and economic considerations so that processes and activities are both ecologically and economically sustainable.<sup>348</sup>

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<sup>344</sup> Ibid 4–5.

<sup>345</sup> Ibid 6.

<sup>346</sup> Ibid 6–7.

<sup>347</sup> Ibid 7–8.

<sup>348</sup> Ibid 8. The paper also discusses non-renewable resources, proposing that ‘the key challenges in managing the use of non-renewable resources are to ensure that their exploitation occurs in the most efficient manner possible, [while ensuring] that full account is taken of the importance of maintaining ecological systems and

### Dealing cautiously with risk and irreversibility

The narrative again displays an ambivalence, acknowledging the need to deal with risk and irreversibility, but then qualifying the policy responses: irreversible damage should be avoided 'wherever possible' and serious but uncertain adverse effects avoided through preventative action or research at 'modest cost'.<sup>349</sup> 'Equally', the discussion paper argues, the risks to economic prospects should be considered and:

In some cases it may be worthwhile paying the price of some environmental damage to ensure ... economic benefits.<sup>350</sup>

### Recognising the global dimension

The narrative here once again displays ambivalence to the point of qualifying a clear principle with wishful or woolly thinking. The proposition that '[w]e should not export our environmental problems ...' is a straight application of intragenerational equity, but it is then qualified with propositions suggesting that some marginal greenhouse-related degradation domestically might improve global outcomes, including that energy-intensive industry might be moved *to* an energy-efficient country like Australia.<sup>351</sup> Similarly, localised environmental degradation might be 'sensible if, in the broader context, biodiversity and ecological processes are maintained',<sup>352</sup> though no explanation is given as to how this might address the global dimension.

### *What Does the Discussion Paper Reveal About Policy Thinking?*

The narrative of the discussion paper suggests both confusion and a profound ambivalence about ESD. The concept itself is defined consistently with an aspiration to ecological sustainability (Policy Tier Five), without explanation for this high policy

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that exploitation occurs [with] minimal environmental damage. This is not explored here as this thesis focuses on renewable resources.

<sup>349</sup> Ibid 9.

<sup>350</sup> Ibid. The text goes on to say that 'this will be particularly relevant in ... development of non-renewable resources, where at least some transient impact on the environment is inevitable.' This is tendentious.

<sup>351</sup> Ibid 10.

<sup>352</sup> Ibid.



ambition. The discussion of the five principles accepts the policy implications of a high policy ambition superficially, but then implies that a lower-level policy ambition consistent with economic efficiency (Policy Tier Three) will achieve this outcome. Some allowance might be made for the fact that officials were grappling, not just with a new and complex issue, but one that placed government in a difficult position. The ambivalence evident in the discussion paper may reflect unresolved disagreements between officials. Hamilton argues that the inconsistency of approach in the paper may be the consequence of its committee authorship, which he sees as a form of incompetence.<sup>353</sup> Another possible explanation is change of actors and perspective, as policy leadership on ESD issues had passed from PM&C, which had driven preparation of the 1989 Statement, to the Primary Industries and Resources portfolio.

*Goal and Principles in the Finalised National Strategy on Ecologically Sustainable Development*

The NSESD, finalised in 1992 after a difficult process which is the subject of the case study in chapter five, contained a statement of goal, objectives and guiding principles concerning ESD as shown in Box 3.7. The policy meaning of these principles is discussed in section 3.4. The point to be made at this stage is that the stated goal and thus its high policy ambition were unchanged, but the objectives and principles were much more coherent and display none of the ambivalence and much less attachment to mainstream policy approaches than were evident in the discussion paper two years earlier. As with the 1989 Statement, the NSESD was developed largely by the iteration of drafts between officials and so archival records shed little light on the intention or understanding of the drafters. It does seem however that official understanding of ESD concepts had waxed significantly even if, as discussed in later chapters, government commitment had waned.

**NATIONAL STRATEGY FOR ECOLOGICALLY SUSTAINABLE  
DEVELOPMENT**

**DECEMBER 1992**

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<sup>353</sup> Hamilton, 'Ecologically Sustainable Development: Implications for Governance in Australia' above n 64, 67.

...

## **AUSTRALIA'S GOAL, CORE OBJECTIVES AND GUIDING PRINCIPLES FOR THE STRATEGY**

### **The Goal is:**

Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

### **The Core Objectives are:**

- to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations
- to provide for equity within and between generations
- to protect biological diversity and maintain essential ecological processes and life-support systems

### **The Guiding Principles are:**

- decision-making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations
- where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- the global dimension of environmental impacts of actions and policies should be recognised and considered
- the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised
- the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised
- cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms
- decisions and actions should provide for broad community involvement on issues which affect them

These guiding principles and core objectives need to be considered as a package. No objective or principle should predominate over the others. A balanced approach is required that takes into account all these objectives and principles to pursue the goal of ESD.

### **Box 3.7: Statement of Goal, Objectives and Guiding Principles from National Strategy on Ecologically Sustainable Development 1992<sup>354</sup>**

## **3.3.4 Intergovernmental Agreement on the Environment**

<sup>354</sup> Council of Australian Governments, 'National Strategy on Ecologically Sustainable Development' (COAG 1992).

As if policy on environment and development was not already complicated enough, Hawke's 'New Federalism' initiative of 1990 added a further layer of complexity. In announcing the initiative, Hawke had identified the environment as an area for improved federal cooperation, against a backdrop of general goals of efficiency, international competitiveness and improved service delivery, and invited the States to join the ESD process.<sup>355</sup> This theme of cooperation was maintained when Cabinet began detailed consideration of the issues, with the advice to Cabinet focused on roles and responsibilities. In relation to policy, this required 'a more secure framework for environment policy making'; States should be involved in Commonwealth policy development where this impinged on their interests, but more significantly environment policy development 'should be integrated with broader economic and social policy, such as the policy of sustainable development'.<sup>356</sup> These reforms should be embodied in an intergovernmental agreement.<sup>357</sup> Governments subsequently agreed to develop an Intergovernmental Agreement on the Environment (IGAE), referring primarily to roles and responsibilities but also referring in passing to 'the umbrella ... of more cooperative intergovernmental environment policy'.<sup>358</sup>

#### *Negotiation of the Agreement*

Tasmania chaired the working group. A key tension between the Commonwealth and States was on broad objectives. The States, led by NSW, placed 'strong emphasis on rationalisation of responsibilities of the different levels of government, in order to establish clear accountability and to put an end to "forum shopping" by pressure groups'.<sup>359</sup> In contrast, Commonwealth officials proposed that the agreement should 'not concentrate on demarcation of roles but should be essentially about development of improved intergovernmental processes ... to address major environmental issues'.<sup>360</sup>

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<sup>355</sup> R J L Hawke, Prime Minister, 'Towards A Closer Partnership', Transcript of Speech delivered at National Press Club, 19 July 1990 (Prime Minister, Canberra) 1, 4, 9.

<sup>356</sup> Australian Government, 'Commonwealth-State Relations: Environment Policy Paper' *Cabinet Memorandum* 7475 (NAA A14039, 7475) 2-3. The proposal was endorsed by Cabinet in Cabinet Minute 14510 (NAA A4250 7475).

<sup>357</sup> Ibid.

<sup>358</sup> Special Premiers' Conference, 'Towards a Closer Partnership', *Communique*, Brisbane, 30/31 October 1990 (Special Premiers' Conference 1990) 11.

<sup>359</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, Deputy Secretary, 'Working Group on Environmental Policy, Second Meeting: Brisbane 20 February 1991', Note for File (Department of the Arts, Sport, the Environment, Tourism and Territories file 91/3931).

<sup>360</sup> Ibid.

At the second meeting the chair circulated a 'Chairman's Paper' on ambit, raising among other things whether the agreement would include 'a philosophy and/or principles and/or a process which all jurisdictions will follow to determine environmental policy ...'.<sup>361</sup>

Initially, the States led the drafting process and draft three of April 1991 included only a brief reference to SD in a clause on interpreting and giving effect to the agreement:

1.3 In reaching this agreement the parties have had regard to a number of important considerations which should also be closely considered in interpreting, applying and giving effect to the agreement. Those considerations are ...

...

(F) The concept of sustainable development provides a foundation for the integration of environmental and economic activities and for balancing the interest of current and future generations.<sup>362</sup>

Dissatisfied with the state drafts because of their strong 'states' rights' flavour,<sup>363</sup> the Commonwealth circulated its own draft agreement, including 'principles of environmental policy' (PEP), essentially a set of ESD principles.<sup>364</sup> The process of developing these principles is not on file and so it is not clear why the draft did not simply adopt a formulation from the 1989 Statement or the NSESD Discussion Paper, but at a subsequent meeting of the drafting group, following 'considerable discussion' of the draft principles of environmental policy, the Commonwealth undertook to provide Working Group members with further information regarding their source.<sup>365</sup> That advice was that the principles stemmed primarily from Australia's involvement in preparations for the then-forthcoming Rio Conference and that in assembling the principles the Commonwealth had also drawn on the interim policy statement on ESD in international development cooperation released

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<sup>361</sup> John Ramsey, 'Ambit of Intergovernmental Agreement on Environmental Policy — Some Questions', Chairman's Paper, 1991, (Department of the Arts, Sport, the Environment, Tourism and Territories file 90/7722).

<sup>362</sup> New South Wales Government, 'Draft Agreement No. 3', circulated by NSW on 2 April 1991, para 1.3 (F) (Department of the Arts, Sport, the Environment, Tourism and Territories file 91/2895).

<sup>363</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, First Assistant Secretary Environment and Conservation Policy Division, 'Intergovernmental Agreement on the Environment', Brief to Portfolio Minister, 16 May 1991 (Environment Department file 91/6384).

<sup>364</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, 'Commonwealth Draft 1, IGAE', dated 15 May 1991 (Department of the Arts, Sport, the Environment, Tourism and Territories file 91/02264).

<sup>365</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, Deputy Secretary, (Commonwealth Working Group Representative), 'Intergovernmental Agreement on the Environment: Principles', memorandum to members of the Working Group on Environmental Policy, 28 August 1991, (Department of the Arts, Sport, the Environment, Tourism and Territories file 91/8670.)

by the Commonwealth in February 1991.<sup>366</sup> These sources are at Appendices 4 and 5 respectively. The documents are too long to analyse here but the salient point is that, while both documents had Cabinet endorsement, that endorsement was given, as on other occasions, without the benefit of advice that analysed the principles, explained their implications, or linked them to other ESD policy statements.<sup>367</sup>

With the States apparently satisfied with this explanation, there was little further debate on the draft principles recorded in subsequent notes of drafting group discussions and indeed the final wording of the PEP in the IGAE is very similar to that in the first Commonwealth draft. In seeking Cabinet authority to finalise the agreement, Minister Kelly noted that only one of five disagreed matters related to the principles.<sup>368</sup> Draft clause 3.3, favoured by the States, provided that '[e]conomic growth is a necessary prerequisite for environment protection'. The Commonwealth saw this as conflicting with its commitment to ESD 'because it does not reflect the need for an integrated approach between economic well-being and environment protection'.<sup>369</sup> The finalised provision was weaker, to the effect that strong economies can enhance the capacity for environmental protection.<sup>370</sup> At the end of the day, it is unclear whether negotiations concerning the principles of environmental policy were straight-forward because the principles were generally agreed, or because they were seen by the States as secondary to the major imperative of preventing the Commonwealth from moving into areas traditionally of state jurisdiction.<sup>371</sup>

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<sup>366</sup> Ibid; see Australian International Development Assistance Bureau, 'Ecologically Sustainable Development in International Development Cooperation: An Interim Policy Statement' (Australian International Development Assistance Bureau 1990).

<sup>367</sup> See Australian Government, 'United Nations Conference on Environment and Development (UNCED: Brazil 1992) — Australian Objectives for Meetings of Preparatory Committee' *Cabinet Submission* 7800, 12 March 1991, (NAA 14039, 7800); Australian Government, 'Ecologically Sustainable Development in International Development Cooperation' *Cabinet Submission* 7672, 11 December 1990 (NAA 14039, 7672).

<sup>368</sup> Australian Government, 'Intergovernmental Agreement on the Environment', *Cabinet Submission* 8409, 29 November 1991 (NAA 14039 8409) Attachment C.

<sup>369</sup> Ibid 4. Interestingly, in their 'coordination comments' on the submission, neither the Treasury nor other economic departments defended the existing draft. Several supported the proposed change while others did not address this issue in their comments: see Attachment E to the submission, 'Coordination Comments'.

<sup>370</sup> Council of Australian Governments (COAG), 'Intergovernmental Agreement on the Environment' (IGAE), cl 3.3.

<sup>371</sup> Subsequent attempts by states to have their assessment and approval processes 'accredited' under Schedule 2 to the IGAE suggest that several states were quite fixed on an approach of having the Commonwealth endorse their processes and then bow out of the assessment and approval of individual developments, despite early Commonwealth advice that the Commonwealth could not, by giving 'full faith and credit' to state decision-processes, then simply bow out of any involvement in individual decisions, in the face of Commonwealth legislation conferring a number of roles on Commonwealth decision-makers. Hollander points out that there was no real state commitment to ESD or environment protection more generally: see Robyn Hollander, 'ESD, Federalism and Intergovernmental Relations in Australia' (2015) 22(1) *Australasian Journal of Environmental Management* 21, 24.

*Finalised Principles of Environmental Policy*

The IGAE was finalised in 1992. Section 3 of the agreement concerned the Principles of Environmental Policy and is reproduced in Box 3.8.

## INTERGOVERNMENTAL AGREEMENT ON THE ENVIRONMENT

...

### SECTION 3 — PRINCIPLES OF ENVIRONMENTAL POLICY

3.1 The parties agree that the development and implementation of environmental policy and programs by all levels of Government should be guided by the following considerations and principles.

3.2 The parties consider that the adoption of sound environmental practices and procedures, as a basis for ecologically sustainable development, will benefit both the Australian people and environment, and the international community and environment. This requires the effective integration of economic and environmental considerations in decision-making processes, in order to improve community well-being and to benefit future generations.

3.3 The parties consider that strong, growing and diversified economies (committed to the principles of ecologically sustainable development) can enhance the capacity for environmental protection. In order to achieve sustainable economic development, there is a need for a country's international competitiveness to be maintained and enhanced in an environmentally sound manner.

3.4 Accordingly, the parties agree that environmental considerations will be integrated into Government decision-making processes at all levels by, among other things:

1. ensuring that environmental issues associated with a proposed project, program or policy will be taken into consideration in the decision-making process;
2. ensuring that there is a proper examination of matters which significantly affect the environment; and
3. ensuring that measures adopted should be cost-effective and not be disproportionate to the significance of the environmental problems being addressed.

3.5 The parties further agree that, in order to promote the above approach, the principles set out below should inform policy making and program implementation.

#### 3.5.1 precautionary principle -

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:

1. careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and
2. an assessment of the risk-weighted consequences of various options.

3.5.2 intergenerational equity -

the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

3.5.3 conservation of biological diversity and ecological integrity -

conservation of biological diversity and ecological integrity should be a fundamental consideration.

3.5.4 improved valuation, pricing and incentive mechanisms -

- environmental factors should be included in the valuation of assets and services.
- polluter pays ie those who generate pollution and waste should bear the cost of containment, avoidance, or abatement
- the users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.

**Box 3.8: Extract from Intergovernmental Agreement on the Environment (1992)<sup>372</sup>**

Read as a whole, and allowing that the agreement is a policy document with some rhetorical content, section three can be seen as an extended form of weak policy integration (Policy Tier 2). The section contains no goal statement. It requires that environmental issues be taken into account and that the PEP be considered. It also requires that decisions have two specific attributes: firstly, that measures adopted should be cost-effective and not be disproportionate to the significance of the environmental problems being addressed; and secondly, that international competitiveness should be maintained.

*Coherence and Significance of Principles of Environmental Policy*

The sense of the PEP is thus to pursue ESD but not at disproportionate cost to the budget and not at the expense of international competitiveness. This approach embodies a contradiction. If sustainability requires that ecological function or biodiversity be maintained, then this is an absolute, not a relative, requirement. The PEP side-steps the contradiction by describing all principles, including absolutes, as considerations only. Further, the argument in clause 3.3, originally that economic growth was a prerequisite for environmental protection but watered down to say that strong economies 'can enhance the capacity' for environmental protection, is still redolent of the specious argument that can be made under WS, in effect, that one can save environmental resources by consuming

<sup>372</sup> COAG, above n 370.

them in order to produce an economic surplus, which can then be applied to compensate for the original resource deficiency. This sense of advancing ESD, but not at significant cost to the economy or, implicitly, the budget is redolent of both the language of budgetary constraints used in the ESD process and subsequent NSESD (see chapter five) and to the environmental policy boundaries or 'rules of thumb' identified by Macintosh.<sup>373</sup> The thesis returns to this point in the final chapter.

### **3.4 What Does ESD Mean and How Does It Differ from Other Sustainability Paradigms?**

The Government muddled the waters considerably through its multiple and overlapping attempts to define and develop the concept of ESD and, at times, through lack of analytical rigour and precision. Despite the contradictions in the IGAE discussed above, it *is* possible to identify a coherent policy paradigm in the various statements of ESD and its principles, *provided* some licence is used. The taking of some licence is justified on the basis that the statements under discussion are statements of social aspiration and policy intent and so should be construed broadly and purposefully. Such an approach to interpreting policy allows redundancy, some inconsistency and rhetoric to be set aside by virtue of the fact that the standard for interpreting policy is neither academic rigour (because policy typically does not aspire to scholarship) nor legal precision (because high-level policy typically is not designed to be applied as rules) but to indicate general intent. Further, it is reasonable to expect that there will be a viable paradigm, because the underlying proposition that the social goal of meeting the material needs of both present and future generations can be met by maintaining the social-environmental system is a rational one. If there is a viable paradigm, its meaning can then be elucidated in part by contrasting it with other sustainability paradigms.

#### **3.4.1 Identifying the ESD Policy Paradigm from Government Policy Statements**

With no single authoritative formulation of ESD, the task is to look for a policy paradigm across the Government's various statements. As a preliminary matter, the 1988 principles can be regarded as superseded by the 1989 Statement, with two exceptions: the NCSA

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<sup>373</sup> Andrew Macintosh, 'The Impact of ESD on Australia's Environmental Institutions', above n 83.



objectives, which had been revived by the 1988 principles, were carried forward into the 1989 Statement, as were the RAC principles.<sup>374</sup> This leaves the 1989 Statement, the NSESD and the IGAE as authoritative policy sources, yet all three suffer from limitations of substance or scope. The 1989 Statement was intended to be of general application but was developed hastily and more as a statement of political vision than of policy, so it lacks policy depth. The environmental policy section of the IGAE was secondary to its focus on federal ‘roles and responsibilities’; it too lacks policy depth and coherence, manifest in part through its lack of a goal statement, although its ‘maintain the productive base’ formulation of IGE does incorporate what is elsewhere presented as an objective. Finally, while the NSESD is the latest and best-drafted statement, its policy section was intended to guide the strategy itself rather than being of general application.

These elements of these three policy statements are compared in Table 3.1.

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<sup>374</sup> The RAC principles were also included in the *Resource Assessment Commission Act 1989* (Cth) (repealed), though only with application to the RAC. This statutory application is left aside here as a special case, especially given that the RAC ceased operations in 1993.

<b>Goal</b> (in the case of the <i>1989 Statement</i> , implied by adopting definition)		
OCOF	NSES	IGAE
[ESD] means economic growth that does not jeopardise the future productive base.	Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.	No goal statement.
<b>Objectives</b> (In the <i>1989 Statement</i> , taken to include 'task'; 'Core objectives' in NSES)		
[Expressed as a principle] Resource use decisions should seek to optimise the net benefits to the community from the nation's resources, having regard to efficiency of resource use, environmental considerations and an equitable distribution of the return on resources.	To enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations.	No equivalent, but see the 'strong economy' principle below.
Maintain essential ecological processes and life-support systems. Preserve genetic diversity. ( <i>Ecological Principle</i> )	Protect biological diversity and maintain essential ecological processes and life-support systems.	[Expressed as a Principle] Conservation of biological diversity and ecological integrity should be a fundamental consideration.
The task is to ensure that we meet the needs of the present without compromising the ability of future generations to meet their needs. ( <i>Intergenerational Principle</i> )	To provide for equity within and between generations	[Expressed as a principle] The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.
To maintain and enhance environmental qualities.	No equivalent	No equivalent
<b>Principles</b>		
There should be an integrated approach to conservation (including all environmental and ecological considerations) and development by taking both conservation and development aspects into account at an early stage. ( <i>Integration Principle</i> )	Decision-making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations	Environmental considerations will be integrated into Government decision-making processes at all levels by, among other things: 1. ensuring that environmental issues associated with a proposed project, program or policy will be taken into consideration in the decision-making process; 2. ensuring that there is a proper examination of matters which significantly affect the environment ...

No equivalent	No equivalent	<p>Environmental considerations will be integrated into Government decision-making processes at all levels by, among other things:</p> <p>...</p> <p>3. ensuring that measures adopted should be cost-effective and not be disproportionate to the significance of the environmental problems being addressed.</p>
<p>Commonwealth decisions ... may provide for additional uses that are compatible with the primary purpose values of the area, recognising that in some cases both conservation and development interests can be accommodated concurrently or sequentially</p> <p>...</p>	No equivalent	No equivalent
No equivalent	<p>Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.</p> <p><i>(Precautionary Principle)</i></p>	<p>Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:</p> <ol style="list-style-type: none"> <li>1. careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and</li> <li>2. an assessment of the risk-weighted consequences of various options.</li> </ol>
No equivalent	<p>The global dimension of environmental impacts of actions and policies should be recognised and considered.</p> <p><i>(Global Principle)</i></p>	No equivalent
No equivalent	<p>The need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised.</p> <p><i>(Growth-Environment Nexus Principle)</i></p>	Included as a preambular statement

No equivalent	The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised. ( <i>Competitiveness Principle</i> )	No equivalent
No equivalent	Cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms. ( <i>Economic Approaches Principle</i> )	Improved valuation, pricing and incentive mechanisms - environmental factors should be included in the valuation of assets and services. Polluter pays ie those who generate pollution and waste should bear the cost of containment, avoidance, or abatement. The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes. Environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.
No equivalent	Decisions and actions should provide for broad community involvement on issues which affect them. ( <i>Participation Principle</i> )	No equivalent
<b>Table 3.1 Comparison of Goal, Objectives and Principles from 1989 Statement, Intergovernmental Agreement on the Environment and National Strategy on Ecologically Sustainable Development</b> (Source: the Author; some names for principles after Macintosh <sup>375</sup> )		

### *Defining the Goal of ESD*

Despite drafting differences, the 1989 Statement and NSESD also share in substance a goal of maximising economic welfare while maintaining the ecological processes on which that welfare depends. The IGAE does not specify a goal but has implicit and contradictory objectives of pursuing ESD without affecting (and perhaps even in reliance on) the health

<sup>375</sup> See Macintosh, 'The Impact of ESD on Australia's Environmental Institutions', above n 83.

of the economy. Across the three documents there is little doubt that government wished both to pursue traditional aspirations for a strong economy and to maintain ecological processes. The issue is whether ESD is subject to maximising welfare or maximising welfare is subject to ecological constraints. Only the latter makes sense.

The *1989 Statement* includes an additional goal from the NCSA of maintaining and enhancing environmental qualities. Obtusely worded, in its original context this goal refers to maintaining amenity values.<sup>376</sup> It need not be discussed further because amenity values are just a particular form of environmental goods.

### *Objectives and Principles Generally*

As a preliminary point, the three statements are inconsistent as to whether certain elements are objectives or principles, in part because the IGAE refers only to 'principles'. To assist in comparing like elements with like, several 'principles' in one statement have been compared with similarly worded 'objectives' in another statement, because they are more an (intermediate) end to be achieved, rather than a means to an end. Thus, for example, maintenance of ecological processes is discussed as an objective, firstly because the 1989 Statement and NSESD treat it as an objective, with only the IGAE expressing that concept as a principle; and secondly because its criticality makes it more appropriately an objective.

The records reveal little about the policy rationale for objectives and principles. In fact, one draft of the NSESD stated that there is:

no definitive set of underlying principles for ESD on which the whole community agrees. In Australia, principles have evolved between those in the Commonwealth discussion paper, and those of the final ESD reports, and they will continue to evolve for some time. The set of guiding principles here captures the spirit of both the ESD process and the IGAE.<sup>377</sup>

This might explain why official records reveal little of deliberations about the formulation of particular elements and consist for the most part of successive drafts, occasionally annotated or supplemented by material indicative of intent or understanding. It may have been that officials did not see the goals and principles as significant, despite there being a variety of views about them, and that their priority was to reach a consensus around a

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<sup>376</sup> NCSA, above n 234, 13.

<sup>377</sup> Australian Government, NSESD, draft 3, 1 April 1992, (NAA A463, 1992/4589) [2].

single set of principles, rather than to explore their policy implications.<sup>378</sup> Even when these documents were taken to Cabinet, whether for preliminary or final endorsement, the relevant submissions did not analyse or evaluate the objectives and principles, not even when, as with the NSESD, the Cabinet submission contained a specific recommendation to endorse the goal, objectives and guiding principles.<sup>379</sup> As if to confirm this view, when the draft NSESD was released for public comment in 1992, the discussion paper simply stated that the principles had been 'endorsed by governments, in the context of the IGAE'.<sup>380</sup>

The record does reveal that some of the later drafting changes to principles in the NSESD was to align them with the now-finalised IGAE.<sup>381</sup> Yet the records do not explain why governments did not take the further logical step of aligning the documents fully. Again, perhaps officials did not think the principles sufficiently important to warrant the effort. Given the limited explanatory material in public or official records, the objectives and principles must be examined primarily by reference to first principles, which from a policy perspective are consistency of purpose and internal coherence.

*Several Possible Elements of the Paradigm Can be Set Aside as Abandoned or Ancillary*

Several putative principles can be set aside as apparently abandoned or unnecessary. The 'concurrent use' principle in the RAC principles was not included in the IGAE or NSESD and does not appear to have been applied since the RAC was discontinued in 1993. Further, as discussed in 3.3.1, the principle had little policy meaning.

The 'global dimension' principle appears only in the NSESD and is ambiguous. It may simply be an application of the integration principle, to note the global dimension as well as long and short-term implications, but if so is somewhat derivative. It may be a principle of process: in the 1989 Statement the Government committed itself to working through international frameworks.<sup>382</sup> A more likely interpretation, on a conventional *realpolitik*

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<sup>378</sup> PM&C did commission an expert report from Michael Young of the Commonwealth Scientific and Industrial Research Organisation (CSIRO), entitled 'Inter-generational Equity and the Precautionary Principle', but this was commissioned at a late stage and did not lead to changes to the goal and principles: see M D Young, 'Inter-Generational Equity and the Precautionary Principle', 6 October 1992 (NAA 463, 1992/2867).

<sup>379</sup> See Australian Government, *Cabinet Memorandum 782*, 'National Strategy for Ecologically Sustainable Development', 21 October 1992; decision in *Cabinet Minute 1337*, 9 November 1992 (NAA 14217, 782).

<sup>380</sup> NSESD, Discussion Paper, above n 380, 7–8.

<sup>381</sup> See NSESD, Draft 3, above n 377, 2. This draft also notes that 'Some other principles have been worded slightly differently than in the IGAE so that they retain their relevance for both economic as well as environment policy'.

<sup>382</sup> Hawke, *1989 Statement*, above n 325, 13.

approach to the national interest, is that it reflects the principle of 'equitable sharing of international costs and benefits' found for example in Australia's negotiating brief for Rio.<sup>383</sup> This argument is supported by the fact that this principle and another principle found only in the NSESD, the principle of maintaining international competitiveness in an environmentally sound manner, were presented in combined form in the discussion draft of the NSESD, suggesting that these principles embodied concerns that Australia should not be disadvantaged through international action.<sup>384</sup> Under any of these interpretations, the 'global dimension' principle is either derivative or a principle of negotiation. It is not essential to a sustainability paradigm, and so can be set aside.

The principle of strong economies enhancing the capacity for environmental protection, articulated as such in the NSESD and in weaker form in the IGAE, is inconsistent with the entropy law and thus with any sustainability paradigm, because it implies that a portion of the wealth gained from consuming resources can be invested successfully to reverse or offset the impact of the original consumption.<sup>385</sup> Recall that the Commonwealth succeeded in having this 'consideration' weakened when negotiating the IGAE, to state that strong economies 'can' enhance the capacity for environmental protection. In this weakened and ambiguous form it must be set aside as lacking policy substance, but without disregarding the *political* substance, which is to indicate a substantial political reticence about advancing ESD at economic cost, despite what ESD might logically require.

Finally, the status of the community involvement principle is unclear, in part because it appears only in the NSESD. On a broad view, it is clearly consistent with sustainability paradigms to engage the public in major long-term decisions that have significant implications. Indeed, Dryzek goes as far as to argue that the powerful coordinating role that deliberative democracy can serve is *essential* to achieving the ecologically benign policy outcomes characteristic of an 'ecological democracy'.<sup>386</sup> There are several significant examples of community involvement in sustainability policy in Australia. The NSESD itself was heavily participative, although on a corporatist model as discussed in chapter five.

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<sup>383</sup> See Department of the Arts, Sport, the Environment, Tourism and Territories, Deputy Secretary, 'Intergovernmental Agreement on the Environment: Principles', memorandum to members of the Working Group on Environmental Policy, 28 August 1991, above n 365, attachment.

<sup>384</sup> See The Ecologically Sustainable Development Steering Committee, *Draft National Strategy for Ecologically Sustainable Development: A Discussion Paper*, June 1992, (AGPS 1992) 8. The combined form was: 'recognition of the global dimension of environmental impacts and the need to maintain and enhance international competitiveness in an environmentally sound manner'.

<sup>385</sup> This is because, even if transaction costs and losses were ignored, the part can never offset the whole.

<sup>386</sup> See Dryzek, *The Politics of the Earth: Environmental Discourses*, above n 51, Chapter 11, 'Ecological Democracy'.

Further, there are examples of sustainability initiatives that involve significant community involvement, notably the 'regional delivery model' for the Natural Heritage Trust from the early 2000s, under which significant environmental investments were administered by 56 regional organisations.<sup>387</sup> On a narrow view however, community involvement is not a necessary condition for rational policy to solve GEDD and Australian governments have pursued it only by exception. Further, while there are many instances of consultation on environmental matters, there is nothing to indicate that these were qualitatively different from standard government consultative practice. Overall, Australian governments have not shown an ongoing commitment to community involvement as a principle of sustainability, either in policy or practice, so a community involvement principle is better regarded as falling outside the ESD principles for analysis here. Note however that the final chapter argues that failures of community involvement were significant in the failure of ESD policies, not because community involvement was a principle of ESD itself but because it is a design principle for any 'grand policy' such as ESD.

### **3.4.2 Analysis of Remaining Elements and Identification of ESD Paradigm**

The remaining elements appear in at least two of the three key documents and can be regarded as 'core' elements of an ESD paradigm. With evidence of official purpose and intent limited largely to the ESD Discussion Paper, these elements must be considered primarily by reference to first principles of coherence.

#### *Intergenerational and Intragenerational Equity*

The normative principles of inter- and intragenerational equity provide the rationale or aspiration for adopting a sustainability goal. Once that aspiration has been realised in the goal statement, attention should shift to the means of achieving that goal, for example by adopting an objective of protecting biodiversity (a macro-level means) supported by specific policies and actions (meso- and micro-level means) to achieve that objective.

In dealing with IGE, the major policy statements have tended to confuse ends and means. At first this was not significant: the 1989 Statement defined IGE as 'the task', when

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<sup>387</sup> This model is described and reviewed by the Australian National Audit Office in Peter McVay and Australian National Audit Office, *Regional Delivery Model for the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality: Department of the Environment, Water, Heritage and the Arts — Department of Agriculture, Fisheries and Forestry* (Australian National Audit Office, 2008).



‘aspiration’ would have been more accurate, but because the Statement served both political and policy purposes it can be interpreted liberally. In the NSESD however, a formal strategy, IGE is used as both a ‘core objective’ (‘to provide for equity ... between generations’) and as a rationale (‘following a path of economic development that safeguards the welfare of future generations’). This is confusing rather than incoherent. In the IGAE however, which does not include a goal, IGE is said to be a principle and is expressed in terms of maintaining the health of the environment for future generations. As the wording used is close to the goal statement of the NSESD, the problem lies not in the formulation per se, but in the treatment of IGE as a principle, because, as will be seen in the legislative case study in chapter seven, this has the effect of directing decision-makers to have regard to a principle whose policy work is already done.

### *Policy Integration*

The principle of policy integration in decision-making was a central theme of the Brundtland Report, one that would also be included in the Rio Declaration.<sup>388</sup> It follows logically from the ubiquity of negative environmental externalities that all decision-making should at least address environmental implications. The principle might even be argued to be otiose, as relevance alone would bring these factors into account when considering ecological integrity and biodiversity. Yet this would ignore the strong view in Brundtland that policy integration required fundamental changes to the manner in which decisions are taken, making policy integration a principle of institutional reform as well as a principle of decision-making.<sup>389</sup>

It is also useful to contrast the approach of the Brundtland Report, described here as ‘weak’ integration directed to reforming decision-making processes rather than outcomes, with the ‘strong’ integration approach of welfare economics, which integrates substantive economic and environmental factors by summing costs and benefits to ascertain the impact of a proposed policy or project on economic welfare.

Australia has shown a preference for weak policy integration. This is illustrated by the case study of the NSESD in chapter five, which concludes that the policy ambition of the recommendations of the ESD Working Groups advising the Government on the strategy

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<sup>388</sup> See *Rio Declaration*, above n 282, Principle 4.

<sup>389</sup> See WCED, above n 7, 310, 314. This point is also recognised in the NSESD Discussion Paper: see Australian Government, above n 380, 17.

corresponded most closely to weak policy integration, as did the finalised strategy. Moreover, policy integration has sometimes been misunderstood or misrepresented in Australia. Rather than being seen as an element of ESD, it is sometimes *equated* with ESD, with the implication that ESD requires only that economic, environmental and social matters, both short and long term, be taken into account. While this argument is found mostly in discourse,<sup>390</sup> chapter seven argues that environmental assessment and approval decisions under the EPBC Act align generally with this approach because, while the Act has a formal object of promoting ESD through the conservation of natural resources, its decisional requirements are based around requirements to have regard to ESD principles and related considerations. Moreover, it appears that the institutional implications of policy integration canvassed in the Brundtland Report may have been misunderstood in Australia. Section 516A(6) of the EPBC Act requires that the annual reports of Commonwealth agencies:

- (a) include a report on how the activities of, and the administration (if any) of legislation by, the reporter during the period accorded with the principles of ecologically sustainable development;

An auditor-general's performance audit concerning this obligation, prepared after it had been in effect for two years, concluded that:

in spite of the Commonwealth's 10-year commitment to ESD, and the more recent requirement for agencies to report annually on their contributions, many agencies are focused solely on the impact of their operations on the natural environment, and are yet to come to terms with the broader implications of ESD and its relevance to their operations. The view that ESD is not relevant to non-environmental agencies' operations is widely held, and will need to be addressed by [the Environment Department] in moving the Government's ESD agenda forward.<sup>391</sup>

The policy intent behind this provision is not clear, because it was one of a large number of amendments to the EPBC Bill included in a single package negotiated behind closed doors to give effect to a political agreement to secure passage of the Bill.<sup>392</sup> Nevertheless it seems quite possible that this was an unsuccessful attempt to give effect to the Brundtland

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<sup>390</sup> See for example the Howard Government's 1997 Oceans Policy, in which the Prime Minister talked of balancing environmental and development: Commonwealth, *Parliamentary Debates*, House of Representatives, 3 March 1997, 1698–9 (John Howard, Prime Minister, Ministerial Statement, 'Australia's Oceans Policy').

<sup>391</sup> Auditor General, *Annual Reporting on Ecologically Sustainable Development*, Audit Report No 41 2002–03, Performance Audit (ANAO 2003) 15–16.

<sup>392</sup> This process is discussed in 7.3.3.

Commission's approach to institutionalising policy integration by requiring agencies to report on these institutional reforms, not the impact of their operations on the natural environment.

### *Precaution*

The precautionary principle has engendered more discussion than any other sustainability principle and is the subject of entire works and some detailed jurisprudence.<sup>393</sup> Much of this is beyond scope, because the issue here is the policy intent of precaution rather than its practice.

The origins of the precautionary principle lie in the German principle of *Vorsorge*, which translates literally as 'beforehand or prior care and worry'.<sup>394</sup> Boehmer-Christiansen argues that *Vorsorge* connotes a duty on government, if 'wisdom and science combine to warn that current actions *may* lead to harm, to change society by persuasion and regulation ...'.<sup>395</sup>

The sentiment of *Vorsorge* seems to be anticipatory, a term that was used in some early policy documents and is also found in the literature on precaution, but has fallen out of favour.<sup>396</sup> Surprisingly there are very few policy statements that shed light on the policy intent of precaution. A rare example comes from an informal statement by a regional UN meeting in 1990, that:

it is better to be roughly right in due time, bearing in mind the consequences of being very wrong, than to be precisely right too late.<sup>397</sup>

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<sup>393</sup> See for example Jacqueline Peel, *The Precautionary Principle in Practice: Environmental Decision-Making and Scientific Uncertainty* (The Federation Press 2005); see also *Telstra v Hornsby Shire Council*, discussed in 7.4.3.

<sup>394</sup> Sonja Boehmer-Christiansen, 'The Precautionary Principle in Germany — enabling Government' in Tim O'Riordan and James Cameron (eds), *Interpreting the Precautionary Principle* (Cameron May 1994) 38–39.

<sup>395</sup> Ibid 33–34, 36, 38–39 (emphasis added). Boehmer-Christiansen argues that by 1976 precaution had become a cornerstone of German environmental policy.

<sup>396</sup> The most prominent example of anticipation as a basis for policy is the OECD *Declaration on Anticipatory Environmental Policies* (1979) in which OECD governments recited their conviction 'that improving the human environment involves sustained long-term effort requiring policies that take into account at an early stage the environmental consequences of major decisions' in declaring their support for policies that, among other things, called for the use of economic and fiscal instruments 'to induce ... enterprises and individuals to anticipate the environmental consequences of their actions and take them into account in their decisions ...': See OECD, *Declaration on Anticipatory Environmental Policies*, 18 May 1979, C(79)121/ANN (OECD 1979) recital d, [3]. For references to anticipation in the literature on precaution, see for example James Cameron and Julie Abouchar, 'The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment', (1991) *Boston College International and Comparative Law Review* 1, 21; Stephen R Dovers and John W Handmer, 'Ignorance, sustainability, and the precautionary principle: Towards an analytical framework' in Ronnie Harding and Elizabeth Fisher, *Perspectives on the Precautionary Principle* (Federation Press 1999) 167, 170.

<sup>397</sup> Norwegian Research Council for Science and the Humanities (NAVF), Sustainable Development, Science and Policy: The Conference Report (NAVF 1990), reporting the United Nations Economic Communities for Europe Conference, 'Action for a Common Future', Bergen, Norway, 8–16 May 1990, cited in Timothy

Domestically, the 1990 ESD Discussion Paper made an insurance argument for precaution, to the effect that the uncertain possibility of irreversible damage justified paying an 'insurance premium' in the form of preventative action or further research, provided, in effect, that the premium was worth paying: avoidance should be chosen 'where possible' after weighing the risk of potentially serious damage against the size of opportunity costs.<sup>398</sup> From first principles, the correct policy response should not be based on insurance, which is a price paid to secure compensation if unlikely events transpire, but on *avoidance*, an act to ensure that unacceptable events do not occur, with the corollary that the consequences of avoidance are accepted as a 'price'. Simple logic (or perhaps 'common sense', since that concept was invoked in the very first Australian case on the precautionary principle),<sup>399</sup> dictates that if the goal is to maintain ecological processes, because they are essential to an enduring quality of life, significant degradation of these processes is unacceptable, as is the *risk* of such degradation. Yet risk is often defined as the product of likelihood and consequence<sup>400</sup> and risk management is directed to harm minimisation. If the likelihood of consequences is not known, which, given a limited human understanding of ecology is often the case with actions affecting the environment, the risks are unknown and cannot be assessed or managed. Rather, what is being managed is uncertainty. Because the consequences, should those uncertain events occur, are unacceptable the *possibility* of environmental degradation must also be unacceptable. The effect of the precautionary principle is thus to extend harm minimisation beyond managing risks, to managing uncertainty.<sup>401</sup> This extension to caution (or prevention, in Gullett's terms), is *precaution*; the prefix is apposite because precaution is anterior in a policy sense to caution. As Gullett describes it:

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O'Riordan and Andrew Jordan, *The Precautionary Principle, Science Politics and Ethics* (Centre for Social and Economic Research On the Global Environment 1995) 3.

<sup>398</sup> Australian Government, ESD Discussion Paper, above n 380, 25.

<sup>399</sup> *Leach v National Parks and Wildlife Service and Shoalhaven City Council* (1993) 81 LGERA 270. Note that at that time the precautionary principle had not been given legislative effect in the relevant jurisdiction (NSW).

<sup>400</sup> Kaplan and Garrick point out that risk is actually a set of risk curves relating to different scenarios (see Stanley Kaplan and B John Garrick 'On the Quantitative Definition of Risk', (1981) 1(1)*Risk Analysis* 11, 13–14) but the simplified approach is sufficient for present purposes).

<sup>401</sup> J Cameron, "The precautionary principle: Core meaning, constitutional framework and procedures for implementation" in R Harding and E Fisher (eds), *Perspectives on the Precautionary Principle* (Federation Press, 1999, 29), p 37; N de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (Oxford University Press, 2005), 74–75, 159.

The preventive principle requires risk and causation to be scientifically proven: the precautionary principle extends the preventive requirements of due diligence where there is uncertainty as to environmental outcomes.<sup>402</sup>

The policy implication is that the normal requirement that government decisions be based on evidence (including CBA or assessed risk) may not apply; the mere *possibility* of unacceptable consequences becomes a sufficient rationale for acting to prevent those consequences, whether proactively, for example by setting an SMS based on the minimax principle of minimising the risk of maximum harm,<sup>403</sup> or reactively, for example by refusing a development application or at least putting the onus of proof on a proponent to demonstrate that a project will not increase the likelihood of irreversible harm.<sup>404</sup>

Precaution might thus be described as 'extended risk management' because it goes beyond managing risks to managing uncertainties.<sup>405</sup> The logic of the principle makes it central to the sustainability paradigm. Yet in conventional terms, a policy of blocking significant economic opportunities, or committing substantial public funds, on the basis of a mere possibility, is a radical approach. It is understandable why environment groups have advocated so strongly for precaution and why there is so little evidence of governments taking a precautionary approach: to those not accepting of the logic, intervention without evidence could appear wasteful and reckless or can be portrayed as such for political purposes. The only saving grace is that the scope of operation of precaution is reduced as scientific understanding increases: a clear policy corollary of precaution is to maximise investment in environmental research.

### *Ecological Processes and Biodiversity*

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<sup>402</sup> Warwick Gullett, 'Environmental Protection and the "Precautionary Principle": A Response to Scientific Uncertainty in Environmental Management' (1997) 14 *Environmental and Planning Law Journal* 52, 57.

<sup>403</sup> See Robert Costanza, 'What is Ecological Economics?' (1989) 1 *Ecological Economics* 1, 4; see also the discussion of precaution in Perrings and Pearce, 'Threshold Effects and Incentives for the Conservation of Biodiversity', above n 131.

<sup>404</sup> A corollary of this reasoning is that where a proposed activity requires government approval and raises the possibility of significant adverse impacts on the environment, the onus of proof should be reversed, requiring the proponent to satisfy the decision-maker that the possible impacts can be avoided, mitigated or offset. The *Telstra* decision discussed in 7.4.4 suggests that this will be the case where a court is reviewing a decision on the merits.

<sup>405</sup> Perrings uses the term 'reserved rationality' for a precautionary approach under which the decision maker reserves their position by allowing initially for uncertainty and a margin for error but leaves scope to relax this position as experience reduces the uncertainty: see Charles Perrings, 'Reserved Rationality and the Precautionary Principle: Technological Change, Time and Uncertainty in Environmental Decision Making' in Robert Costanza (ed), *Ecological Economics: The Science and Management of Sustainability* (Columbia University Press 1991) 153.

This element combines two related principles, one of maintaining ecological processes (or integrity), the other of maintaining biodiversity. In both the 1989 Statement and NSESD, the maintenance of biodiversity and ecological processes is an objective, while in the IGAE this is a principle, but one expressed to be a ‘fundamental consideration’.

Official records do not explain why the IGAE refers to biodiversity as a fundamental consideration. Commonwealth officials advised state counterparts that they developed the principles of environmental policy by drawing on two documents, one of which, the *Interim Policy Statement on ESD in International Development Cooperation* does describe biodiversity in these terms, but without explanation.<sup>406</sup> Neither do the Cabinet submissions seeking endorsement of the IGAE or endorsing the other two source documents assist as they do not discuss the principles of environmental policy.<sup>407</sup>

On balance, the policy documents treat maintenance of ecological processes and biodiversity as an objective, two by direct reference and the IGAE indirectly by describing biodiversity in the relevant principle as fundamental. This is consistent with the policy logic: the science shows that these ecological attributes are essential to maintaining the capacity of renewable resources to renew, which is part of the sustainability goal. Ecological processes and biodiversity are two aspects of maintaining natural processes and might have been combined as a single objective such as maintaining ecological resilience, but the desirability of doing so is more an issue of science than policy.<sup>408</sup>

### *Economic Approaches*

This element appears in the NSESD and IGAE as a principle, but in significantly different forms. The long version in the IGAE appears to address the application of economics in

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<sup>406</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, Deputy Secretary, ‘Intergovernmental Agreement on the Environment: Principles’, above n 365. The other documents were Australia’s general negotiating position for UNCED 1992.

<sup>407</sup> See Australian Government, ‘Intergovernmental Agreement on the Environment (IGAE)’ *Cabinet Submission 8409* above n 368; Australian Government, ‘United Nations Conference on Environment and Development (UNCED: Brazil 1992) — Australian Objectives for Meetings of Preparatory Committee’ *Cabinet Submission 7800*, above n 367; Australian Government, ‘Interim Policy Statement on ESD in International Development Cooperation’, Australian Government, ‘Ecologically Sustainable Development in International Development Cooperation’, *Cabinet Submission 7672*, above n 367.

<sup>408</sup> Ecological process are the basal processes of ecosystems such as respiration and nutrient cycling, while biodiversity relates to the variety and variability of life; the relationship between the two remains uncertain: see Roberto Cazzolla Gatti, ‘A century of biodiversity: some open questions and some answers’ (2017) 18(4) *Biodiversity* 175, 177, 178. See also Brian Walker, David Salt and Walter Reid, *Resilience Thinking: Sustaining Ecosystems and People in a Changing World* (Island Press, 2010).

sustainability generally: *substantively*, by reference to polluter pays and user pays policies; *procedurally*, through including environmental factors in valuation of assets and services for CBA; and in *implementation*, through the requirement for cost-effective approaches, incentives and market mechanisms. The shorter version of the principle in the NSESD is largely confined to implementation, advocating cost-effective policy instruments, except that it mentions valuation as an example, which seems egregious because valuation is most relevant to economic analysis rather than implementation.<sup>409</sup>

In either version, given an objective of maximising economic welfare, this principle is unnecessary. Pursuit of welfare maximisation will automatically involve the decision tool of CBA with its requirement for valuation. As to implementation, the broader literature on policy implementation points to economic instruments as being more cost-effective than traditional regulation, due to their automaticity.<sup>410</sup>

Why would this principle be included if unnecessary? The use of market mechanisms to achieve policy objectives was regarded as innovative at the time, enhancing cost-effectiveness. Dales had pioneered the concept of economic instruments (also ‘market-based instruments’), proposing tradable emission permits only in 1968,<sup>411</sup> while the USA was pioneering their application at this time.<sup>412</sup> Agenda 21, the implementation plan agreed at the Rio Conference in 1992, advocated several market-based instruments including tradable permits as ‘innovative financing’.<sup>413</sup> Those drafting the policy statements may have considered it necessary to mention economic instruments because of their novelty, or to emphasise that regulatory burden should be minimised.

### *Emergent ESD Paradigm*

The paradigm that emerges from the above analysis as a coherent response to GEDD is as follows. The goal is to maintain or enhance quality of life indefinitely, which can also be expressed in the words of the 1989 Statement: ‘to ensure that we meet the needs of the

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<sup>409</sup> While environmental goods and services have values under economic instruments such as emissions trading schemes, these values are usually set by the market through the act of trading, rather than through valuation.

<sup>410</sup> See for example Lester M Salomon, ‘Economic Regulation’ in Lester M Salomon (ed), *The Tools of Government* (Oxford University Press, 2002) 32.

<sup>411</sup> J H Dales, *Pollution, property and prices: an essay in policy-making and economics* (University of Toronto Press, 1968).

<sup>412</sup> *Clean Air Act Amendments of 1990*, Pub L No 101–549 104 Stat. 2468.

<sup>413</sup> UNCED, above n 7, 301.

present without compromising the ability of future generations to meet their needs.<sup>414</sup> The rationale for this goal is IGE. The goal can be achieved by maximising economic welfare while maintaining ecosystem function ('welfare subject to ecological constraints'). The constraint of maintaining ecosystem function is necessary because nature relies on the integrity of its constituent ecosystems to function and on biodiversity for resilience. Failure to observe these constraints will see natural systems depleted, eventually to collapse and irreversible loss, with consequent loss of quality of life options for future generations.

Several principles guide and support policy decisions in pursuit of this objective. The first is weak policy integration, which emerges as a practical principle for ensuring that environmental considerations are addressed fully in decision-making. The second is precaution. Because we have defined the maintenance of those systems as essential, irreversible losses of ecosystem function must be avoided. Further, because our understanding of natural systems is partial, any significant degradation of ecosystems that *might* cause irreversible loss of ecosystem function must also be avoided, even at significant opportunity cost. On the other hand, several other ESD principles are not essential to decision-making under this paradigm. Intergenerational equity has already been given effect in selecting the goal, so is not required as a separate consideration in decision-making, while the principle of using economic instruments is a principle of implementation rather than of primary policy choice.

### **3.4.3 ESD Contrasted with Other Sustainability Paradigms**

Ecologically Sustainable Development shares certain characteristics with other major sustainability paradigms, WS, SD and SS. In their evolved forms, all four are driven by IGE. All four hold, broadly, that this requires that environmental resources be maintained and transmitted from one generation to the next, to allow each successive generation the opportunity to apply the flows of income and services from that base to optimise their own welfare. The paradigms differ as to the nature of this resource base, and thus as to how it should be maintained. However, only ESD and SS are adapted specifically and exclusively to achieving the social goal of reversing GEDD. Moreover, while emerging from different policy-framing and analysis, these two paradigms converge in functional terms.

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<sup>414</sup> Australian Government, *1989 Statement*, above n 325, 4.



*ESD Distinguished from Weak Sustainability*

Weak sustainability is an extension of neoclassical economics and arose from analysis of scarcity issues associated with exhaustible resources. This analysis was stimulated by the oil crisis of the early 1970s rather than by the environmental debate of the same era. The underlying insight of the Solow-Hartwick ‘savings rule’ emerging from this analysis is that society sustains wealth by sustaining capital, and that capital includes natural capital, not just the traditional classes of financial and manufactured capital. If capital was in decline, for example through the depletion of exhaustible resources, wealth could be maintained by capitalising the rents from resource extraction. This policy implication was Solow’s ‘rule of thumb’ that society should keep its capital intact and ‘live off the interest’.<sup>415</sup> As this applied to renewable as well as exhaustible natural capital, Pearce et al could identify this approach as ‘weak sustainability’ and a potential approach to GED.<sup>416</sup>

While WS recognises natural capital as essential to sustaining wealth, its focus on *total* capital means that it allows the substitution of one kind of capital for another, provided that total value is maintained.<sup>417</sup> From a policy perspective the resulting problem is that WS does not generate any policy recommendations specific to GEDD, which should not be surprising since this paradigm was not developed with that end in mind.<sup>418</sup>

*Ecologically Sustainable Development Distinguished from Sustainable Development*

Ecologically Sustainable Development evolved from the conservation paradigm of WCS, via the NCSA; it draws on the Brundtland Report and its articulation of SD principally for the legitimacy that SD provided. However, in contrast to SD, ESD is concerned primarily with only one of the twin moral principles of SD, that of IGE. Most of the distributional concerns behind *intra*-generational equity remain outside ESD, because they are concerned with global poverty and the relative positions of less developed countries, while ESD is predominantly a domestic policy. The limited *intra*-generational concerns of ESD are primarily those between Australians and arise for example when policies to protect the

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<sup>415</sup> See Robert M Solow, ‘On the Intergenerational Allocation of Natural Resources’ (1986) 88(1) *Scandinavian Journal of Economics* 141; Robert Solow, ‘An Almost Practical Step toward Sustainability’ (1993) 19(3) *Resources Policy* 162.

<sup>416</sup> See 3.2.1.

<sup>417</sup> This prompted Neumayer to label WS ‘the substitutability paradigm’: see Neumayer, above n 230, 8.

<sup>418</sup> For a clear explanation of the different phenomena addressed by the Solow/Hartwick paradigm and an ‘ecological’ approach to sustainability, see Mick Common and Charles Perrings, ‘Towards an Ecological Economics of Sustainability’ (1992) 6(1) *Ecological Economics* 7.

resource base result in job loss.<sup>419</sup> But ESD is not just SD without intragenerational equity, or SD with the word 'Ecological' added as a qualifier. The Brundtland Report talked of maintaining the resource base and the Rio Declaration of policy integration and internalising environmental costs, but the key ESD documents deal more specifically with maintaining ecological processes and biodiversity in terms that originate in conservation science of the WCS.

Another difference between SD and ESD concerns economic growth. Part of the narrative of SD concerned the need to maximise growth on a rationale of the urgent need to eliminate global poverty and inequality.<sup>420</sup> This was clearly inapplicable to ESD as a domestic policy narrative.<sup>421</sup> The economic narrative of the ESD is one of continuing existing policies to maximise economic welfare, but now within ecological constraints. ESD has a growth narrative but is one of 'growing differently', that giving 'full weight' to the costs as well as to the benefits of development required that renewable resources should be managed to avoid irreversible depletion.<sup>422</sup> As a conservation-based paradigm, ESD does not have an endogenous theory of growth or welfare maximisation but instead seeks to modify existing economic policy to accommodate conservation imperatives, as seen for example in the 1989 Statement.

### *ESD and Strong Sustainability: Convergent Paradigms*

In contrast to the conservation science origins of ESD, SS emerged with the then-new discipline of ecological economics and its efforts to blend disciplinary paradigms and analysis from economics and science in addressing issues of environmental sustainability.<sup>423</sup> In its base form SS requires that natural capital be maintained; substitutability with other classes of capital is limited or even non-existent because the functions performed by

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<sup>419</sup> See *ESD Discussion Paper*, above n 380, 7. See also the second RAC principle, calls for optimising the net benefits of resource decisions, having regard to efficiency, environmental considerations and 'an equitable distribution of the return on resources'. This concern for intragenerational equity domestically has led to 'structural adjustment' payments to those who lose their jobs, for example through the protection of forests under Regional Forest Agreements (RFAs).

<sup>420</sup> See for example the *1989 Statement*, above n 325, 3

<sup>421</sup> The statement does make a passing reference to global poverty: *ibid.*

<sup>422</sup> *Ibid* 3–4. By inference, the unexplained 'fundamental link between economic growth and the environment' recognised in the statement (at 4) is that true quality of life is only achieved on an enduring basis by pursuing growth (or welfare) within ecological constraints.

<sup>423</sup> See Richard B Norgaard, 'The Case for Methodological Pluralism' (1989) 1(1) *Ecological Economics* 37.

natural capital are usually unique and sometimes essential.<sup>424</sup> The policy prescriptions that flow from non-substitutability depend on which of two variants of SS is applied; what might be described as the ‘biophysical’ variant requires that the quantum of natural capital be maintained in biophysical terms (eg hectares), while the ‘value’ variant requires that quantum be maintained in value terms. The value variant facilitates trade-off decisions (including environmental offsets) because it allows the substitution of natural capital with other natural capital of equal value,<sup>425</sup> but as Neumayer implies,<sup>426</sup> value, even if it could be quantified accurately, does not differentiate between differing ecological functions, so, unless substitutability between classes of natural capital is also constrained by a ‘like for like’ criterion, the objective of maintaining ecological function is not necessarily achieved.

Subscribers to the biophysical variant usually also argue that it is ‘critical’ natural capital (CNC) that must be protected or restored, with criticality defined by reference to ecosystem function.<sup>427</sup> Thus, although rooted in different disciplines and following different development paths, SS and ESD converge on the maintenance of ecosystem function. Work by ecologists and economists from the 1990s has enabled classification of ecosystem functions in terms of the services that they provide to humans.<sup>428</sup> During the same period Daily and her collaborators had developed the concept of ecosystem services.<sup>429</sup> These developments facilitated the further development of the concept of CNC so that substitutability could be assessed in terms of impacts on functionality, such as the impact of land clearing on life-support, source and sink functions.<sup>430</sup> This convergence was further strengthened with the adoption of the SEEA as an international standard for environmental accounting in 2012, following a 20-year gestation.<sup>431</sup> In providing an officially recognised means of taking both economic and biophysical data into account in a ‘combined presentation’ format (ie accounting in both monetary and biophysical units) the SEEA can be used for policy development and monitoring, thus bringing the

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<sup>424</sup> See for example Norgaard, ‘Sustainability as Intergenerational Equity: Economic Theory and Environmental Planning’ above n 258; see also David Pearce, ‘Substitution and Sustainability: Some Reflections on Georgescu-Roegen’ (1997) 22(3) *Ecological Economics* 295.

<sup>425</sup> See Barbier, Markandya and Pearce, ‘Environmental Sustainability and Cost-Benefit Analysis’, above n 230.

<sup>426</sup> Neumayer, above n 230, 26.

<sup>427</sup> See Paul Ekins et al, ‘A Framework for the Practical Application of the Concepts of Critical Natural Capital and Strong Sustainability’ (2003) 44(2–3) *Ecological Economics* 165.

<sup>428</sup> De Groot for example identified four key environmental functions: regulation functions, eg regulation of runoff; carrier functions, eg space for reserves; production, eg oxygen and food; and information functions, eg scenic areas: see R De Groot, *Functions of Nature* (Wolters-Noordhoff 1992).

<sup>429</sup> Daily et al *Nature’s Services*, above n 96, 1997.

<sup>430</sup> Paul Ekins, ‘Identifying critical natural capital; Conclusions about critical natural capital’ (2003) 44 *Ecological Economics* 277; Paul Ekins et al, ‘A Framework for the Practical Application of the Concepts of Critical Natural Capital and Strong Sustainability’, above n 427, 175.

<sup>431</sup> The SEEA is discussed further in chapter four.

operationalisation of either paradigm to the same point.<sup>432</sup> The two paradigms are essentially the same. Because they have different intellectual and developmental origins, each tends to validate the other.

### 3.5 Policy Implications of ESD

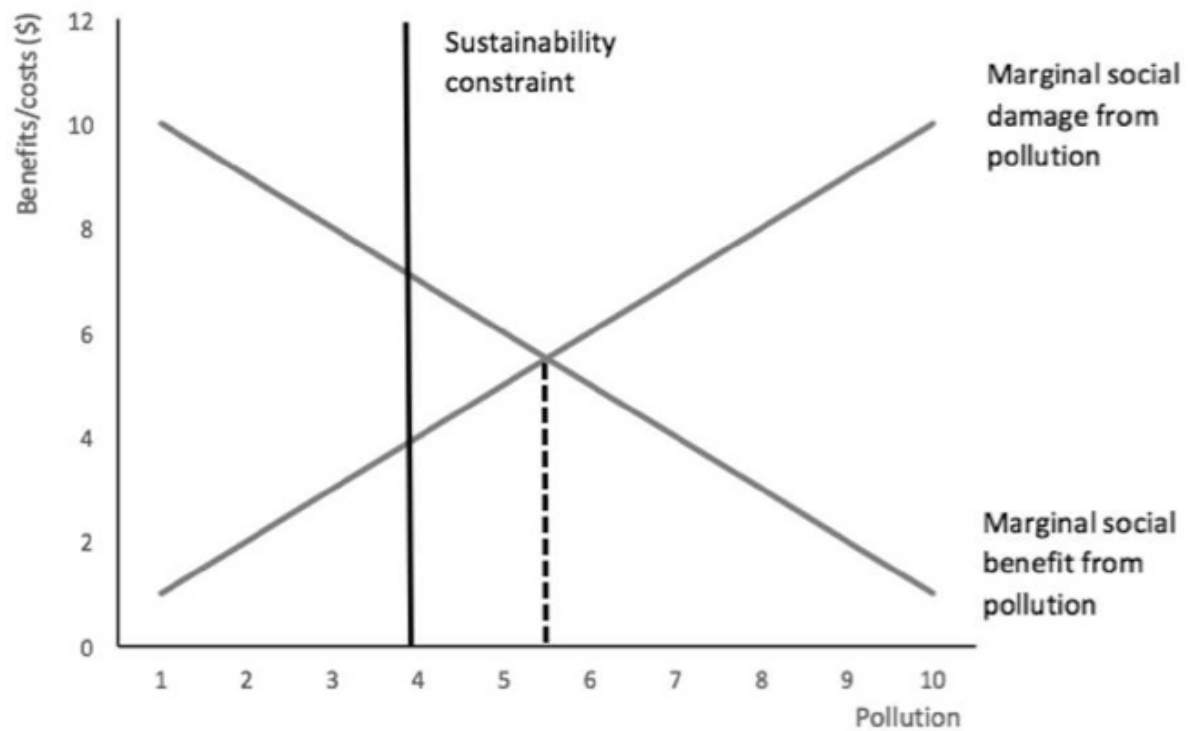
Properly interpreted, the ESD paradigm stands as a rational and coherent response to the problem of GEDD. It has a sound pedigree in the conservation science of the WCS, which was tested and endorsed domestically through the stakeholder engagement of the NCSA. It incorporates the moral authority of SD, although narrowed to what the Brundtland Report described as 'physical sustainability'. It also incorporates, as far as it can without compromising its fundamental purpose, the dominant economic growth paradigm of politics. It is also implicitly proportional: if the evidence were that ecological processes were fully functional and biodiversity high, ie if natural systems were in good condition, ESD would prescribe no more than a watching brief.

Despite its coherence, where the environment is significantly degraded the policy implications of ESD will pose significant difficulties for government. A key reason for this is that the constraints it implies are biophysical, not economic, and are thus not subject to trade-offs.<sup>433</sup> In fact, under ESD, a failure to conform to constraints is not just undesirable; it is, with two qualifications discussed below, unacceptable. This is illustrated in figure 3.1, from Macintosh. The example in this figure concerns the setting of a standard for a hypothetical pollutant, but the underlying principle is equally applicable to any good or service, whether environmental or not.

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<sup>432</sup> The SEEA could be used for WS as well, but would not take advantage of the capacity of accounts to be kept in both monetary and physical units.

<sup>433</sup> Trade-offs are not just the norm in politics but a central concept in economics: see John Quiggin, 'Economic Constraints on Public Policy' in Michael Moran, Martin Rein and Robert E Goodin (eds), *The Oxford Handbook of Public Policy* (Oxford University Press 2006) 531, 539–541.



**Figure 3.1 Application of an ESD Frame to a Hypothetical Pollutant<sup>434</sup>**

As Macintosh explains:

[T]he standard neoclassical economic approach would be to fix the level of pollution at the point at which the marginal social benefit of pollution curve intersects with the marginal social damage from pollution curve (5.5 pollution units). If the pollution is more than this, the social damage for each additional unit of pollution will exceed the social benefit, thereby driving down net social wellbeing. Similarly, if the level of pollution is less than 5.5 units, it is also economically inefficient because the social benefit will exceed the social damage. Net social wellbeing, judged according to the preferences of the current generation, could be improved by increasing pollution to 5.5 units. While this would be efficient in economic terms, it would violate the sustainability constraint, thereby degrading a non-substitutable form of natural capital. If an ESD framework is applied, policymakers would be required to adhere to the sustainability constraint and keep pollution to a maximum of 4 units, even though this is 'inefficient'.

Moreover, while the curves representing marginal social damage and marginal social benefit from pollution are not fixed, and, with different consumer preferences, might intersect at points indicating that the optimal level of pollution is lower at 5 units, or perhaps higher at 6, the ESD-derived sustainability constraint remains, as Macintosh suggests, immovable

<sup>434</sup> Andrew Macintosh, 'Ecologically Sustainable Development (ESD) and the Cost-Effectiveness Principle', above n 83, 247 (figure 1).

because it is biophysical: preferences may change but the facts do not. The major implication for decision-making is that, under an ESD goal, there are no trade-offs: a given level of consumption of environmental resources is either sustainable or not. (Note that this discussion concerns ESD and its close analogue, SS. Under WS, the sustainability constraint could be moved toward or past the economically-optimum point by increasing total capital, irrespective of the type of capital involved. Thus, in theory, otherwise-unsustainable pollution could be offset by, for example, diverting expenditure from transfer payments to building more roads. This illustrates why WS is not a viable approach if the goal is to reverse GEDD, a biophysical phenomenon.)

There are two qualifications to this conclusion. The first is that a biophysical sustainability constraint would move (to the right in figure 3.1) if ecological function is enhanced by investment in ecological restoration. The second qualification concerns an implementation issue, the rate of change. If the level of existing degradation is such that ecological constraints could only be met at enormous financial or economic cost, government might, without departing from the paradigm, decide to move into compliance with ecological constraints at a rate slower than what might be theoretically achievable. In that case the deferred restoration task is greater but the cost is not necessarily higher. For example, costly carbon emission sequestration might be deferred on the basis of a decision to sequester a larger quantity of carbon later, at lower cost.<sup>435</sup> Clearly however this risks increasing harm and gambles on future costs being lower or future income being higher.

Ecologically sustainable development is clearly a viable policy paradigm. Given a social goal of halting GEDD, it is better adapted than WS and SD to achieving that goal and functionally equivalent to the only other major paradigm, SS. Given that it imposes constraints on the previously unconstrained approach of maximising economic welfare, implementing ESD may well come at major short-term economic and political cost, a point to which we return in the concluding chapter, but such costs would be the price of ensuring that a high (but not necessarily the highest) quality of life endures.

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<sup>435</sup> The deferral can only be to the extent that the emissions reduction profile can realistically compensate for a reduced slope in the shorter term with an increased slope later. If the deferral were for too long a period, the degradation caused in the meantime might be irreversible.

## CHAPTER FOUR

### ENVIRONMENTAL INFORMATION AND ECOLOGICALLY SUSTAINABLE DEVELOPMENT

*In every field of knowledge the accepted explanations depend less on the marshalling of evidence and of preconceptions of what serves as a logical framework for the evidence. The framework dominates the evidence, because it dictates what evidence should be sought or ignored.*

From *The Causes of War*, by Geoffrey Blainey <sup>436</sup>

This chapter is the first of four case studies of Australian Government policies to give effect to ESD. Comprehensive and high quality information is of particular importance to environmental decisions not only because they are mostly concerned with managing the biophysical, but also because ecological systems are characterised by complexity and uncertainty. Despite these characteristics, in principle information policies should be the easiest class of policy to develop in support of ESD. The resources required for information-gathering and analysis should be modest compared to those required for investment in on-ground action, and information measures should be relatively non-controversial, as they have few direct economic and social impacts.

Yet information policies provide a conspicuous example of ESD-related policy failure. This chapter argues that despite significant effort over an extended period, and despite the emergence of well-adapted information frameworks, Australian policy on environmental information is a clear example of Dovers' 'policy ad hocery and amnesia',<sup>437</sup> characterised by repeated failures to establish and maintain comprehensive information systems and frameworks in support of policy goals, and to integrate the efforts of various agencies and levels of government. As a result, despite significant activity over more than four decades,

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<sup>436</sup> Quoted in McKenry, Keith and Department of Home Affairs and the Environment, *An Emerging Framework for a System of Australian Environmental Statistics*, Australian Environmental Statistics Project (AESOP) Paper 9 (DHAE 1981) ii.

<sup>437</sup> Stephen R Dovers, 'The Rise and Fall of the NSESD, or Not? [1999] (4) *Australian Environmental Law News* 30, 32.

Australia lacks the capacity to inform sustainability policy in a comprehensive manner and is unable to measure the extent to which its ESD goal is being achieved.

## 4.1 Context and Approach

The role of environmental information is more nuanced than simply identifying problems and informing discourse and decisions. As van Dijk et al put it:

At least in theory, better use of information should improve the effectiveness and efficiency of environmental measures; promote more sustainable use of natural resources (eg by supporting a market system); provide evidence for policy development; help identify and manage risks early; and help experts, businesses and public to understand and consider environmental functions and the trade-offs between economic, social and environmental goals.<sup>438</sup>

In an ESD context, information will be essential to setting ecological constraints, informing decisions within those constraints, and, perhaps most importantly, given the generational self-denial underpinning the social goal of IGE, public accountability.

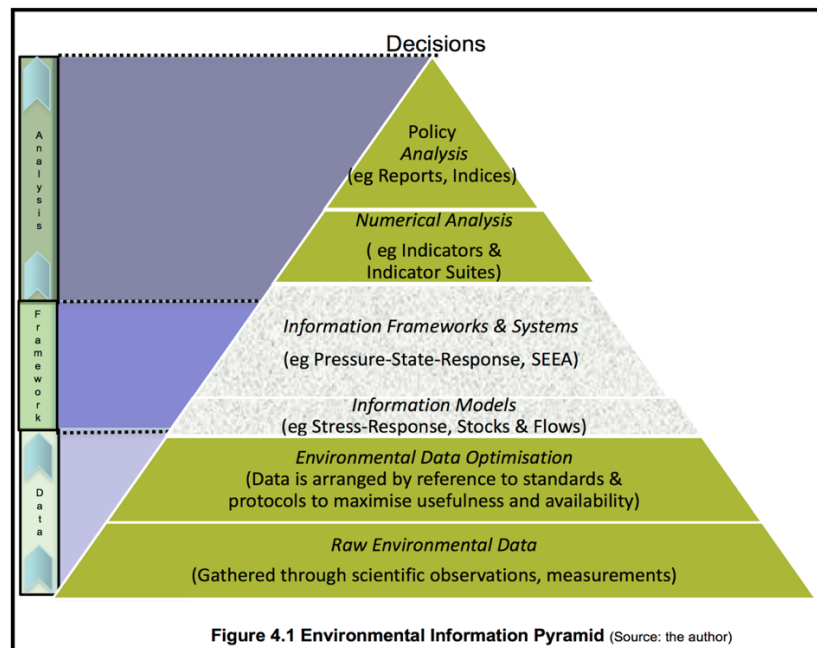
Environmental information can be represented as a layered pyramid as shown in figure 4.1, in which environmental data (raw observations of the physical environment) form the base.<sup>439</sup> Rising through the layers, data are then arranged (by reference to metrics, standards and protocols) to optimise their consistency and usability. Using information models, frameworks and systems, data are then collated, aggregated and analysed statistically, transforming them into information. Finally, this information is analysed and evaluated (eg through reports and indices) by reference to policy goals and objectives and becomes policy knowledge, which can then be applied to inform decisions.

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<sup>438</sup> Albert van Dijk et al, 'Environmental reporting and accounting in Australia: Progress, prospects and research priorities' (2014) 473–474 *Science of the Total Environment* 338, 340.

<sup>439</sup> This figure is original but draws on other versions of the information pyramid: see for example Carolyn Hendricks and Ronnie Harding, "Macro" Briefing Paper', in Institute of Environmental Studies (ed), *Tracking Progress: Linking Environment and Economy Through Indicators and Accounting Systems. Conference Papers* 1996 Australian Academy of Science Fenner Conference on the Environment (Institute of Environmental Studies, University of NSW, 1996), fig 1.





### *Approach, Terminology, Scope*

Environmental information policy in Australia has tended to focus on the bottom of the pyramid, manifesting a general instrumentalism of ‘more and better information.’ This chapter argues that there has been a corresponding lack of focus on the middle section, covering information frameworks and systems that transform data into information suitable for policy analysis. General instrumentalism is a necessary but not sufficient basis for policy: without an appropriate framework, the identification of relevant data becomes more ad hoc and analysts are likely to *assume* a model or framework in order to aggregate data in a policy-meaningful way. This is a fundamental concern given the prominence of complexity and uncertainty in this field. As a result, discussion here is oriented to the role of information in decision-making, rather than to the ‘lower-pyramid’ aspects of gathering and organising information, or the ‘upper-pyramid’ tasks of developing indicators or applying information in individual decisions. Consistent with this, Dovers’ terminology of ‘informing systems’ is used in preference to the more technically oriented term, ‘information systems’.<sup>440</sup>

<sup>440</sup> Stephen Dovers, ‘Processes and Institutions to Inform Decisions in the Longer Term’, in Institute of Environmental Studies (ed) *Tracking Progress: Linking Environment and Economy Through Indicators and Accounting Systems, Conference Papers*, 1996 Australian Academy of Science Fenner Conference on the Environment

Also consistent with a focus on mid-pyramidal informing systems, a number of other matters fall out of scope. Theories on the role of information in decision-making, such as 'knowledge utilisation', which suggests that empirical evidence is only one of many factors influencing policy-making, relate to the individual decisions of the upper pyramid,<sup>441</sup> while general standards concerning the quality of information, such as timeliness, accuracy, coherence, interpretability and accessibility are issues of the lower pyramid: compliance with quality standards can be assumed here.<sup>442</sup> Indicator suites are beyond scope because they are not concerned as much with the organising of information as with its application.<sup>443</sup> Information should also be distinguished here from research, despite the close connections between the two, because the policy knowledge of interest here is generated primarily by assembling existing (if not readily available) information, while research is concerned with generating knowledge more generally. Informing systems also need to be distinguished from analytical tools such as EIA or CBA.<sup>444</sup> Finally, as the chapter is directed to information policy generally and to informing ESD decision-making in particular, it does not seek to be comprehensive in its coverage of Commonwealth and national information policy initiatives in the modern environmental era, including major subject-specific information initiatives such as those relating to climate change and water,<sup>445</sup> although some are discussed when relevant to broader information issues.

## 4.2 Emergence of Environmental Information Approaches, Concepts and Systems After Stockholm

Although the focus of this chapter is on information policies in support of ESD, a number of concepts and systems predating ESD remain relevant for contextual reasons.

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(Institute of Environmental Studies, The University of New South Wales, Sydney, 30 September to 3 October 1996) 2.

<sup>441</sup> See for example C H Weiss, 'Knowledge Creep and Decision Accretion' in (1980) 3 *Knowledge* 381; see also Adnan A Hezri and Stephen R Dovers, 'Sustainability indicators policy and governance: Issues for ecological economics' (2006) 60 *Ecological Economics* 86, 88–91, where the authors position their discussion of environmental indicators in the context of broader debates concerning the relationship between information and decision-making, including both 'knowledge utilisation' and 'evidence-based policy-making'.

<sup>442</sup> See for example Australian Bureau of Statistics, *ABS Data Quality Framework*, Cat no 1520.0, (ABS 2009).

<sup>443</sup> For an example of an indicator suite, see Australian and New Zealand Environment and Conservation Council and State of the Environment Reporting Task Force, 'Core Environmental Indicators for Reporting on the State of the Environment' (ANZECC 2000).

<sup>444</sup> Impact Assessment is discussed in chapter seven while CBA is discussed in passing in chapter three.

<sup>445</sup> For example, the National Carbon Accounting System (NCAS) and the role of information under the *Water Act 2007* (Cth) are not discussed.

*The Stockholm Conference and Response of International Institutions*

When governments began to respond to GEDD in the early 1970s, they were quick to recognise the importance of environmental information. The Stockholm Declaration declared that ‘the free flow of up-to-date scientific information and a transfer of experience must be supported and assisted to facilitate the solution of environmental problems ...’,<sup>446</sup> while the supporting Stockholm Action Plan gave ‘environmental assessment’, which included several classes of environmental information, equal billing with ‘environmental management’.<sup>447</sup> Among other things, the plan recommended the preparation of ‘national reports on the state of, and outlook for, the environment’.<sup>448</sup>

Both the UN and the OECD responded to Stockholm by directing significant effort to environmental information. The United Nations Environment Programme, itself a product of Stockholm, established the Earthwatch program and began producing SoE reports in 1974,<sup>449</sup> while the OECD launched a project on environmental indicators in 1972 and commenced work on SoE reporting in 1976.<sup>450</sup> The OECD concluded at an early stage that environmental statistics were an increasingly recognised body of data and that ‘[o]ne of the major tasks is to *coordinate and integrate the disparate data systems ...*’.<sup>451</sup> As such:

[t]his will require the construction of an integrated and coordinated system of environmental statistics, with appropriate linkages with statistics concerning economic activities which have an important effect on the environment.<sup>452</sup>

They also recognised the centrality of accounting to the task of integration:

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<sup>446</sup> *Stockholm Declaration*, above n 15, Principle 20.

<sup>447</sup> See *Action Plan for the Human Environment*, above n 200, 27–28. More generally, see Part C, ‘The Action Plan’.

<sup>448</sup> Ibid, see recommendations 20, 40, 95 (a), (d), (e). A full list of all recommendations relating to ‘Environmental Assessment (Earthwatch)’ is set out in Part C of the Plan, ‘The Action Plan’.

<sup>449</sup> Johnson, *UNEP The First 40 Years: a Narrative* above n 233 42; Thomas M Parris, ‘Tracking Down State of the Environment Reports’, (2000) 42 *Environment* 3, 3. The reports were annual until 1992 but five-yearly since then.

<sup>450</sup> Bill L Long, *International Environmental Issues and the OECD 1950–2000: An Historical Perspective* (OECD, 2000) 11, 42, 53. State of the environment reporting actually dates from 1970 (ie predating Stockholm) when US legislation commenced requiring the President to prepare an annual Environment Quality Report: see the *National Environmental Policy Act of 1969* 42 U.S.C. § 4321 et seq, s 201. SoE reporting had also commenced in Japan in 1972: Organisation for Economic Cooperation and Development, Environment Directorate, *Report on the State of Environmental Statistics* (OECD 1978) 5. This report also notes one-off reports by several other countries.

<sup>451</sup> OECD, *Report on the State of Environmental Statistics*, above n 450, 11 (original emphasis).

<sup>452</sup> Ibid 14.

[S]tatistics of natural resources and energy are best developed as an integrated system within the framework of material-energy balance statistical systems. This ... would permit the linkage of these statistics with that of economic transformation of materials and provide a basis for structural analysis of economic activity.<sup>453</sup>

### *Early Emergence of Information Frameworks*

The OECD decided to undertake a survey of country practice. The UN would later elect to do the same, on the grounds that this was still an emerging field, lacking the 'general theory of connecting stocks, flows and structural changes of the population' that underpinned the SNA; on this ground it also decided that it should develop a 'less rigid' *framework* in preference to a *system*, and, given the diversity of existing practice, to do so using a 'bottom-up' methodology.<sup>454</sup>

The OECD's 1977 survey of environmental statistics identified five approaches, namely statistical yearbooks; SoE reports; reports on specific sectors such as air quality; solid waste disposal surveys; and work on environmental indicators (although no comprehensive sets had yet been published).<sup>455</sup> The report also noted that several countries had expressed interest in developing '*material-energy balance accounts* which attempt to analyse stocks and flows in physical and energy units, and are following closely the United Nation's Statistical Office initiative in this field'.<sup>456</sup> The later survey of frameworks undertaken by the UN in 1984 identified four basic approaches. The *media approach* organised environmental issues by media, eg air, water. The *stress-response approach* examined the impact of human action on the environment (stress) and the resulting environmental change (response). The *resource accounting approach* traced the flow of natural resources from their extraction, through their transformation through production and consumption, to recycling all return to the environment as waste. Finally, *ecological approaches* included a variety of applications of statistics to ecology and seemed to be a residual category.<sup>457</sup>

Taking the OECD and UN work together, three major approaches to organising information for policy purposes can be identified. The first and most general approach, as

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<sup>453</sup> Ibid 16.

<sup>454</sup> United Nations Statistical Office, *A Framework for the Development of Environment Statistics*, Statistical Papers, Series M, No 78, (UN 1984), 7 (emphasis added).

<sup>455</sup> OECD, *Report on the State of Environmental Statistics*, above n 450, 4–9.

<sup>456</sup> Ibid 8 (original emphasis).

<sup>457</sup> United Nations Statistical Office, 'Survey of Environmental Statistics: Frameworks, Approaches and Statistical Publications', Statistical Papers, Series M, No 73 (United Nations, 1982).

described by Hezri and Dovers, is one of general *instrumentalism*, which follows a ‘value-free’ Weberian view of policy relevance to make the assumption that ‘more and better knowledge’ will improve decision-making.<sup>458</sup> The ‘media’ and ‘ecological’ approaches are examples of this, designed to classify or arrange data by reference to physical characteristics but without implying any principles of organisation for *policy* purposes, beyond basic concepts of relevance and measurability. The second major approach is the *stress-response model* developed within the OECD in the 1970s and which underlies both the UN’s environmental statistical framework (see below) and the subsequent ‘pressure-state-response’ (PSR) model developed to support state-of-the-environment reporting.<sup>459</sup> The third major approach is *accounting*, originally described as material-energy balance or natural resource accounting, but now usually described as environmental accounting.

These three approaches are considered in more detail below but several other approaches can first be set aside here as partial or derivative. Sector-specific approaches are either partial, or ‘atomistic’ in the sense identified by Hezri and Dovers: they apply an approach that is specific to the exercise concerned.<sup>460</sup> Indicator-sets do not qualify as a separate approach here because they are derived from information which in itself has been organised by applying a statistical system or framework. They belong at the top of the information pyramid.

In 1979 the OECD went on to produce its first SoE report, with the OECD Council recommending formally that member countries do likewise.<sup>461</sup> The Council also recommended that members act more broadly on environmental information by:

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<sup>458</sup> Hezri and Dovers, ‘Sustainability Indicators, Policy and Governance: Issues for Ecological Economics’, above n 441, 88, citing Max Weber, *Economy and Society: An Outline of Interpretive Sociology* (Bedminster Press New York 1968) 24–26.

<sup>459</sup> This model had been articulated within the OECD as early as 1977 the ‘stress-response model’: see OECD Group of Experts on the State of the Environment, ‘Structured Framework for Environmental Statistics and Indicators on the State of the Environment’, Document ENV/SE/77.6 (OECD 1977). The UN would later attribute the ‘stress-response’ model to Statistics Canada, citing: Statistics Canada, *Towards a Comprehensive Framework for Environment Statistics: A Stress-response Approach*, (Statistics Canada 1979). The OECD paper was prepared by Tony Friend, described as a ‘consultant’, but certainly a former, if not current, employee of Statistics Canada.

<sup>460</sup> See Adnan A Hezri and Steven R Dovers, ‘Australia’s Indicator-Based Sustainability Assessments and Public Policy’ (2009) 68 *Australian Journal of Public Administration* 303, 307. The authors give (at 307) as an example of an atomistic approach the 24 ‘national headline sustainability indicators’ developed for: Environment Australia, *Are We Sustaining Australia? Report Against Headline Sustainability Indicators* (Environment Australia, 2002).

<sup>461</sup> Organisation for Economic Cooperation and Development Council, ‘Recommendation of the Council on Reporting On the State of the Environment’ (OECD, Decision C(79)114, 18 May 1979) recommendation II(3). Note that the OECD Council is that organisation’s peak decision-making body and Council decisions are binding on member countries, subject to the Member country complying with its own constitutional procedures: see *Convention on the Organisation for Economic Co-operation and Development*, opened for signature on 14 December 1960 (entered into force 30 September 1961) arts 4, 6. Even though some Council decisions are

Intensify[ing] efforts to improve scientific knowledge, information, statistics and indicators on the state of the environment, in order to contribute to the evaluation ... of the state of the environment ... of activities that have an impact on the environment ... and of environmental policies themselves ...<sup>462</sup>

The UN went on to produce *A Framework for the Development of Environmental Statistics* (FDES) in 1984.<sup>463</sup> Both the OECD SoE approach and the UN FDES were built on the stress-response approach. As to the accounting approach, although several countries had pursued it in several forms in the 1970s,<sup>464</sup> including the French and Norwegian approaches of accounting in physical metrics only,<sup>465</sup> the major development of environmental accounting, in a form that seeks to integrate physical and monetary measures, took place in the 1980s (see 4.3 below).

### *The Stress-Response Approach*

The OECD Council recommendation on SoE reporting in 1979 was the culmination of earlier work by the OECD Group of Experts on the State of the Environment. Papers developed by that expert committee explain the conceptual framework for SoE reporting as being based on concepts of 'human demands' and 'natural resources'; the 'confrontation' of these elements 'generates *issues* which require attention and/or action of various *actors* ... according to their objectives and functions.' As a result, 'a *'demand-resource* (or demand-supply) *axis* is the major axis of the conceptual framework adopted ...'<sup>466</sup> This appears to be a hybridisation of the economic concepts of demand and supply with a science-based 'stress-response' conceptualisation of human activity placing pressures on

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expressed as recommendations, OECD Council Acts are nevertheless formal expressions of intent and create the expectation that countries will act on them.

<sup>462</sup> OECD Council, 'Recommendation of the Council on Reporting On the State of the Environment', above n 461, recommendation I(2).

<sup>463</sup> United Nations Statistical Office, 'A Framework for the Development of Environment Statistics Statistical Papers', above n 457.

<sup>464</sup> OECD, *Report on the State of Environmental Statistics*, above n 450, 8. There is evidence that Japan was considering moves in this general direction even before Stockholm: Rowland cites a Japanese report to the OECD (*OECD Annual Review 1970–71*, Japan Memorandum, Supplement E45430) that they were examining a change from "flow economics to stock economics". Rowland, writing on Stockholm, regrets they didn't table it there: see Rowland, *The Plot to Save the World: The Life and Times of the Stockholm Conference on the Human Environment*, above n 198, 78–79.

<sup>465</sup> Robert Repetto, 'Report on natural resource accounting: Information paper on the use of natural resource accounting for countries with natural resource-based economies and potential first steps in Australia' (Australian Environment Council, Canberra, 1988) 6–7.

<sup>466</sup> OECD, Group of Experts on the State of the Environment, 'Structure for Reporting on the State of the Environment', Document ENV/SE/77.6 (OECD 1977) 1–2 (original emphasis).

the environment, to which the environment responds physically, and a policy conception of problem-solution. Under this conception, the logical solution is either to consume resources more efficiently or constrain their consumption:

Long-term environmental policy is directed either at the reduction of environmental stress by modifying the *process* of production and consumption, or at placing restraints on the use of environmental resources, ie conservation policy ...<sup>467</sup>

This stress-response model, later usually described as the PSR model, was widely adopted by the UN for the FDES.<sup>468</sup> It spawned derivatives, including the ‘driving forces-state-response’ (DSR) model, developed by the UN Commission on Sustainable Development, and the ‘driving forces-pressure-impact-state-response’ (DPISR) variant developed by the European Statistical Agency.<sup>469</sup> One thing to note about the stress-response approach, reflecting its 1970s and 1980s ‘DNA’, is that it conceptualises the environment in what are essentially economic terms, as classes of resources (eg environmental media such as air and water and general descriptions such as ‘wildlife’),<sup>470</sup> rather than in terms of acknowledging that these ‘resources’ are aspects of nature and are interconnected, for example as elements of ecosystems or biogeochemical cycles. Despite subsequent developments such as the ecosystem services model, this approach has been retained even in the 2013 revision of the FDES.<sup>471</sup>

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<sup>467</sup> OECD, ‘Structured Framework for Environmental Statistics and Indicators on the State of the Environment’, above n 459, 3 (original emphasis).

<sup>468</sup> Organisation for Economic Cooperation and Development, *The State of the Environment 1985* (OECD 1985) 11, Figure 2. The state of the environment report which the OECD Council noted in 1979 articulated the PSR model only in relatively non-specific terms: see OECD, *Report on the State of the Environment in OECD Member Countries* (OECD 1979); Long above n 450, 129; UN, FDES, above n 457, 8–10.

<sup>469</sup> The DSR model varied the PSR model on the basis that ‘pressure’ had been used largely with environmental indicators only and that ‘driving force’ would accommodate the addition of social, economic and institutional indicators more accurately: See United Nations, Secretary General, ‘General Discussion of Progress in the Implementation of Agenda 21, Focusing on the Cross-Sectoral Components of Agenda 21 and the Critical Elements of Sustainability, Information for decision-making and Earthwatch: Report of the Secretary-General’, UN Doc E/CN.17/1995/1, (UN 1995) 6; for the DPISR model see Edith Smeets and Rob Weterings, ‘Environmental indicators: Typology and Overview’, Technical Paper No 25, (European Environment Agency, 1999).

<sup>470</sup> OECD, ‘Structured Framework for Environmental Statistics and Indicators on the State of the Environment’, above n 459, 2, figure 2; Reena Shah, ‘International Frameworks of Environmental Statistics and Indicators’, (UN Statistical Division, 2000) 2.

<sup>471</sup> See United Nations, ‘Framework for the Development of Environmental Statistics’ (UN 2013). Note that a key difference between the two frameworks however is that the FDES is a general statistical framework, while the PSR framework was developed specifically for state of the environment reporting.

*Australian Approaches to Environmental Information Following Stockholm*

Australia was an active participant in the Stockholm Conference and in the actions initiated there. It contributed to the design and implementation of the UNEP Earthwatch program, including by agreeing to build a baseline atmospheric monitoring station.<sup>472</sup> Australia also became an active participant in the OECD Environment Committee, whose work program included environmental information.<sup>473</sup> Despite this, the focus of Australia's environmental information effort was domestic. This policy style is evident in most environmental policy to this day: Australia is an active contributor to international effort but, other than implementing specific international obligations, its policies are domestic in origin, influenced by international developments but rarely operating as domestic subsets of international measures.

Having only established its first dedicated federal environment department in 1972, the focus of Australia's environmental information efforts at this time was on establishing basic capacity. As had the Stockholm Conference, government quickly concluded that information was central to environmental policy and the Environment Minister sought funding to establish a research and information bureau.<sup>474</sup> During this period the Government also initiated other measures directed to obtaining comprehensive information: the Australian Biological Resources Study (ABRS) to 'coordinate research in taxonomy';<sup>475</sup> an Ecological Survey of Australia, to assemble data to 'provide a sound base' for the selection of national parks and reserves, while also providing 'the ecological background' for other studies;<sup>476</sup> a program of national air quality monitoring, including a National Data Centre;<sup>477</sup> a Commonwealth-State Soil Erosion Survey;<sup>478</sup> and an acceleration

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<sup>472</sup> Department of the Environment, *Annual Report 1974–1975* (Department of the Environment, 1975) 19. The station would later be constructed at Cape Grim, Tasmania.

<sup>473</sup> Ibid 21–22.

<sup>474</sup> Australian Government, 'Bureau of Environmental Studies', *Cabinet Submission 397*, 17 September 1973 (NAA A5915, 317) 1.

<sup>475</sup> Before the ABRS, information on native flora and fauna sat in various libraries, museums and herbaria: Australian Biological Resources Study, Australian National Conservation Agency, *Australian Biological Resources Study: Enriched Through Living Biodiversity*, pamphlet (Australian Nature Conservation Agency, Canberra, circa 1994). The ABRS continues to this day and is a rare example of an information program with continuity over a long period. See for example Department of the Environment *Annual Report 2014–2015* (Department of the Environment 2015) 41–42.

<sup>476</sup> Department of Environment, *Annual Report 1974–1975* (AGPS Canberra, 1975) 11, 13.

<sup>477</sup> Department of Environment, Housing and Community Development, *First Annual Report 1976* (AGPS Canberra 1976) 8.

<sup>478</sup> Department of Environment, Housing and Community Development, *A Basis for Soil Conservation Policy in Australia*, Commonwealth and State Government Soil Conservation Study, Report 1 (AGPS 1978). The Commonwealth and states had been cooperating on soil conservation issues since 1946, but the first national assessment of soil erosion was not published until 1971: see Standing Committee on Soil Erosion, *Study of Community Benefits of, and Finance for, Soil Conservation* (AGPS 1971). This was the second national assessment



of the Commonwealth-State program of water resource data-gathering.<sup>479</sup> It also initiated a 'comprehensive land-use survey throughout Australia ... to establish a land-use databank and develop a total land use strategy' and 'a pilot investigation on the feasibility of developing an Australia wide environmental database'.<sup>480</sup> These projects did not come to fruition.<sup>481</sup>

Government efforts were not confined to the bottom layers of the information pyramid. With a much lower profile but arguably greater significance, the Government commenced research into accounting-style approaches, demonstrating a clear understanding that information needed to be organised and analysed in the context of a policy framework:

A balance sheet showing the state of the Nation's environment in detail is as yet beyond the capacity of the Department ... Aspects of the basic methodology in preparing such a balance sheet are under examination in the ... Bureau of Environmental Studies and the main technical problems are the development of baseline descriptions of the Australian environment, the monitoring of changes to it, and the setting of national objectives and approaches to standard-setting in pollution control.<sup>482</sup>

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and the publication was in summary form: the data on which it was based were not published until the Woods Report of 1983: see L E Woods, *Land Degradation in Australia* (AGPS 1983).

<sup>479</sup> See Moss Cass, 'A National Approach to Water Resources Management: a statement of Australian Government policy' by the Minister for the Environment and Conservation, the Hon. Moss Cass, MP (Australian Government 1974). The statement placed considerable emphasis on data-gathering and research. This led among other things to a review of Australian water resources in 1975 (Australian Water Resources Council, *The Review of Australian Water Resources 1975* (Department of Natural Resources 1976)). Note that although described as the 'first' national review, reviews of water resources development had been published in 1965 and 1966, following the establishment of a National Water Resources Council (of ministers) in 1963 and a national water resources assessment program in 1964 supported by state grants under the *State Grants (Water Resource Measurement) Act 1964* (Cth): see Australian Water Resources Council, *Review of Australia's Water Resources 1963* (Department of National Resources 1965); Department of National Development, *Australia: review of water resources development, 1964-66* (Department of National Development, 1966); and (for brief background) Department of Resources and Energy, *The first national survey of water use in Australia*, Australian Water Resources Council, Occasional Papers Series No 1, (AGPS 1981) 2.

<sup>480</sup> Department of Environment, Housing and Community Development, *First Annual Report 1976*, above 477, 44.

<sup>481</sup> Another initiative that did not come to fruition was the Government's attempt to link information to policy goals, most prominently through a commitment to a 'human progress index', see the 'Governor-General's Speech' (Commonwealth, *Parliamentary Debates*, Senate, 27 February 1973, 6-12 (Governor-General)) in which he said (at 11-12) '[My Government] is, however, deeply conscious that economic growth and material well-being no longer reflect the whole aspirations and expectation of the Australian community, and that prosperity alone is no longer exactly equated with true progress. The Department of the Environment and Conservation proposes to develop a "human progress" index to reflect the new and emerging human and social values in a modern society.'

<sup>482</sup> Department of the Environment, *Annual Report for Period July 1974 to June 1975* (AGPS 1975) 1.

*Australian Environmental Statistics Framework*

In 1977 the Government initiated the Australian Environmental Statistics Project (AESOP), designed to assess the need for, and appropriate form of, a 'comprehensive statistical report on the state of the natural environment in Australia'<sup>483</sup> and to provide a means of integrating assessments of the economic and social impact of environmental policies.<sup>484</sup> In other words, the project was directed towards developing a statistical framework for environmental information. Among other things, the AESOP project produced a statistical compendium, *Australian Environmental Statistics 1981*,<sup>485</sup> with the expressed intention of 'mak[ing] available the environmental information necessary for the rational formulation, implementation and evaluation of policies', using a framework that was acceptable for the organisation of statistics and regionally based.<sup>486</sup>

Although 'far from comprehensive',<sup>487</sup> the compendium was significant simply as the first of its kind. The department advised the Minister that the compendium was the first national-level report of this nature published in Australia and that its production followed the 1979 OECD SoE recommendation.<sup>488</sup> The compendium was based on the 'stress-response' model which informed the OECD PSR model, although, suprisingly, the term 'stress-response' was omitted because it attracted stakeholder criticism concerning cause-effect connotations!<sup>489</sup>

Interestingly, while the resulting 'emerging framework' built around four 'sectors' was consistent with the stress-response model, it went somewhat further and anticipated later approaches by framing the policy response in terms of the 'constraints' that policy

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<sup>483</sup> Keith McKenry and Don McRae, *Towards a National Approach to Environmental Statistics: Recent Developments in Australia* (Environmental Studies Paper AESOP-5, Department of Science and the Environment, Canberra, 1979) 2, 8–9; Department of Environment, Housing and Community Development, *1978 Annual Report*, (AGPS Canberra 1978) 35; Department of Science and the Environment, *The Australian Environmental Statistics Project (AESOP): A Response to Questions Raised*, (Department of Science and the Environment, 1979) 9.

<sup>484</sup> Department of Home Affairs and Environment, *Environmental Regions of Australia* (AGPS, Canberra, 1983) 1.

<sup>485</sup> Department of Home Affairs and Environment, *Australian Environmental Statistics 1981* (AGPS, Canberra, 1981).

<sup>486</sup> *Ibid.*, iii.

<sup>487</sup> Ian Wilson, Minister for Home Affairs and Environment, 'Australian Environmental Statistics Available for the First Time', *News Release* 10 August 1981 (Office of the Minister for Home Affairs and Environment, Canberra).

<sup>488</sup> Department of Home Affairs and Environment, First Assistant Secretary, Environment Division, 'Australian Environmental Statistics 1980', brief to minister 9 July 1981 (Department of Home Affairs and Environment Department file 81/1383).

<sup>489</sup> Keith McKenry and Don McRae, 'Towards a National Approach to Environmental Statistics: Recent Developments in Australia', *Australian Environmental Statistics Project (AESOP) Paper 5* (Department of Science and the Environment, Canberra, 1979) 5.

responses imposed. The first sector was ‘human activity/pressures on the environment’, covering flows of resources, commodities and disposal of waste.<sup>490</sup> The second, ‘prevailing environmental conditions’, corresponds to condition of stocks, covering matters such as air quality and the condition of biota.<sup>491</sup> The third, ‘resource inventory’, is a ‘detailed inventory of known stocks of certain significant natural and cultural resources,’<sup>492</sup> while the fourth, ‘policy-related constraints’ encompasses the noting of ‘policy measures, adopted specifically for the purpose of keeping to within acceptable limits the pressures on the environment arising from human activity.’<sup>493</sup> Indeed, it may have been that departmental thinking was already moving beyond the stress-response model towards what would emerge in the 1980s as environmental accounting, as it noted in a briefing that the minister had made undertakings at the 1979 OECD meeting to ‘endeavour, to the extent practicable, to develop systems to account for changes in environmental quality and related resource stocks.’<sup>494</sup>

Like many other such initiatives, the AESOP program was not renewed and there were no further editions of the compendium, severely limiting its value by preventing the development of trend data. Despite this, the AESOP project produced work of lasting value: not only the emerging framework above, but other study papers including a preliminary proposal to use the stress-response approach as a basis for organising Australian environmental statistics<sup>495</sup> and the first published set of environmental regions of Australia, based on a grouping of local government areas.<sup>496</sup> A full list of AESOP project publications is at Appendix 6.

With a change of government in 1983, the focus of environmental policy shifted from information frameworks to data-gathering. The Hawke Government had come to power

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<sup>490</sup> See Keith McKenry, *An Emerging Framework for a System of Australian Environmental Statistics*, Australian Environmental Statistics Project (AESOP), Paper 9 (Department of Home Affairs and Environment, Canberra, 1981) 3.

<sup>491</sup> Ibid; see for example at 10.

<sup>492</sup> Ibid 12.

<sup>493</sup> Ibid 14.

<sup>494</sup> Department of the Environment, First Assistant Secretary, Environment Division, ‘Proposed Ministerial Foreword to “Australian Environmental Statistics 1980”’, [no day specified] August 1980 (Department of Environment file 81/1375). (Ultimately there was no ministerial foreword in the publication.)

<sup>495</sup> See Tony Friend and Department of the Environment, Housing and Community Development, *Preliminary Proposal for a Stress-Response Approach for the Organisation of a System of Environmental Statistics for Australia*, Australian Environmental Statistics Project (AESOP) Paper 2, (Department of the Environment, Housing and Community Development 1978). McKenry 1981, above n 490, contains a full list of AESOP publications.

<sup>496</sup> Department of Home Affairs and Environment, *Environmental Regions of Australia* (AGPS, Canberra, 1983). The AESOP project also gave rise to sectoral studies, including the 1983 report *Land Degradation in Australia*: see Woods, above n 478.

with a commitment to establish an Environmental Survey of Australia, but interpreted this in office as the national coordination of access to existing data holdings.<sup>497</sup> Despite substantial exploration with the States, this initiative ultimately did not proceed.<sup>498</sup> In the meantime the stakeholder-led National Conservation Strategy for Australia had been finalised and considered by government in 1984 (see 3.2.4). It too emphasised data-gathering, including the ‘accumulat[ion of] knowledge for future application’ as one of five ‘strategic principles’, although the more specific ‘priority actions’ in the strategy, while emphasising knowledge-related issues such as education and research, did not include any information initiatives per se.<sup>499</sup> Overall, the strategy seemed to view information as serving a supporting role.<sup>500</sup> The Hawke Government also completed several sector-specific information initiatives.<sup>501</sup>

### *Early State of the Environment Reporting in Australia*

The exception to the focus on data-gathering in the early to mid-1980s was State of the Environment reporting, but the promise of this first attempt at implementing the PSR framework in Australia would be short-lived. The publication of *Australian Environmental*

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<sup>497</sup> Department of Home Affairs and Environment, ‘Environmental Survey of Australia’, Draft New Policy Proposal and Cabinet Submission (Department of Home Affairs and Environment file 1983/1354 part 2). Consistent with this approach, the department later noted that a more accurate name for the initiative might be ‘Australian Environmental Information System’: Department of Home Affairs and Environment, ‘Opening Statement’, in *Environmental Survey of Australia, Report of a Commonwealth-State Workshop Held in Adelaide, SA, 21–22 November 1983* (AGPS Canberra 1985) 1–2.

<sup>498</sup> The Commonwealth subsequently persuaded the Australian Environment Council to undertake a feasibility study for a national environmental database, on the basis that it would be a cooperative venture by Commonwealth and State environment agencies, centred on a database of bibliographic, research-in-progress and primary environmental data to be maintained by CSIRO: see Australian Environment Council, *Australian Environment and Conservation Database Feasibility Study*, AEC Report No 15, (AGPS, 1985) 1. The study concluded (at 91) that ‘an effective system for acquiring and disseminating information can be established at relatively little cost.’ Environment ministers, in response, gave in-principle endorsement by to the systematic linking and facilitating of access to existing environmental information systems and data bases for policy analysis (see Assistant Secretary, Research and Information, ‘National Environmental Information System’, Minute to the Secretary, 25 November 1986 (Environment Department file 83/2533, Part 3). Yet the initiative did not proceed. Instead, the Commonwealth proceeded with a lesser initiative, compiling a ‘pilot directory’ of 113 existing datasets in the portfolio, with details of these and other Commonwealth datasets then included in a Commonwealth land-related directory, *Landsearch*: see Department of Arts, Heritage and Environment, *Annual Report 1986–87*, (AGPS 1987) 69.

<sup>499</sup> See *A National Conservation Strategy for Australia*, above n 234, ‘Strategic Priorities’ and ‘Priority Actions’.

<sup>500</sup> The Government agreed to the NCSA in principle but failed to implement it — see 3.2.4.

<sup>501</sup> It completed the previous government’s study of Australia’s water resources to 2000: see Department of Resources and Energy, *Water 2000: A perspective on Australia’s water resources to the year 2000* (AGPS 1983). Again this had a data focus: in responding to the finalised report, Resources Minister Walsh advised Cabinet that ‘underlying the entire study was an identified need for more and better quality data and information’: see Australian Government, ‘Water policy and program’, *Cabinet Submission 821*, 30 May 1984, Attachment B, 12 (NAA: A13977, 821). The Government also undertook a broad national assessment of Australia’s surface water and groundwater resources in consultation with the States. This was published in 1987: see Department of Primary Industries and Energy and Australian Water Resources Council, *1985 Review of Australia’s Water Resources and Water Use* (AGPS 1987).

*Statistics 1981* had been a significant step towards state of the environment reporting and in the same year a Parliamentary committee had expressly recommended regular, coordinated, national reporting of that kind.<sup>502</sup> In 1985 the Government went on to publish *State of the Environment in Australia*, the first national state of the environment report, with the stated intent that such reports be published annually.<sup>503</sup> The ministerial preface repeated the words of the preface to *Australian Environmental Statistics*, above, about the aim of such reporting being to assist policy formulation, implementation and evaluation.<sup>504</sup> The report conformed to the PSR model in being based on an overview of ‘the condition, the key pressures and significant environmental management arrangements’ for each main environmental sector.<sup>505</sup>

A similar report was published in 1986. Both reports included an overview that discussed ‘current concerns’, including the following commentary in the 1986 report:

There are serious gaps in the available data.

...

A consequence of this fragmented data base is ... a lack of coherent information to assist governments to formulate policies and programs.

...

Improving the availability of nationwide environmental information for decision-making is the main aim of the Environmental Survey of Australia, currently being developed ...<sup>506</sup>

However, the series was then discontinued due to ‘resource constraints’,<sup>507</sup> ironically just before the publication of the Brundtland Report and the emergence of Cabinet tensions about the need for environmental decisions to be based on well-formulated policy approaches and comprehensive data.<sup>508</sup> State of the Environment reporting would not resume for a decade.

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<sup>502</sup> House of Representatives Standing Committee on Environment and Conservation, Parliament of Australia, *Environmental Protection: Second Report on the Adequacy of Legislative and Administrative Arrangements* (National Parks and Wildlife Conservation Act; Great Barrier Reef Marine Park Act; Environmental Statistics) (1981), [215]–[220].

<sup>503</sup> Department of Arts, Heritage and Environment, *State of the Environment in Australia 1985* (AGPS, Canberra, 1985); Commonwealth, *Parliamentary Debates*, House of Representatives, 25 November 1985, 3598 (Barry Cohen, Minister for Arts, Heritage and Environment, Ministerial Statement).

<sup>504</sup> Department of Arts, Heritage and Environment, *State of the Environment in Australia 1985*, above n 503, iii.

<sup>505</sup> *Ibid.*, vi. In addition, for each sector one or two major issues were selected for detailed review.

<sup>506</sup> Department of Arts, Heritage and Environment, *State of the Environment in Australia* (Department of Arts, Heritage and Environment, Canberra, 1986) 6.

<sup>507</sup> Commonwealth Environment Protection Agency, ‘Development of a National State of the Environment Reporting System’, Discussion Paper, (CEPA 1992) 22.

<sup>508</sup> See 3.3.1 above.

### 4.3 Development of Environmental Information Approaches in Parallel with Sustainability Concepts from the mid-1980s to the Rio Conference 1992

Chapter three has described how sustainability concepts began to emerge in public documents and discourse from the publication of the World Conservation Strategy in 1980, with the UN commissioning what became the Brundtland Report in 1983. In an apparently unconnected initiative, in the same year UNEP and the World Bank embarked on an initiative to improve national income measurement by taking environmental factors into account.<sup>509</sup> This would lead to the full development of environmental accounting, offering an approach that, because of its 'stocks and flows' foundations and environmental-economic integration is almost perfectly suited to supporting sustainability policies.

#### 4.3.1 Emergence of Environmental Accounting

##### *Antecedents of Environmental Accounting*

Recall from 3.1.3 that Ayres and Kneese had been the first to argue that environmental externalities were the norm rather than the exception and needed to be brought fully into account 'as a materials balance problem for the entire economy' — ie as a system of stocks and flows, which would then be 'simultaneously accounted for and related to welfare' in a general equilibrium approach.<sup>510</sup> Economic conceptions of capital as stock and income as flow date back to Fisher's work around the turn of the 20<sup>th</sup> century,<sup>511</sup> but systems to measure stocks and flows go back much further: the global standard, double-entry accounting, traces its roots back to the 13<sup>th</sup> century. Until the mid-20<sup>th</sup> century, however,

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<sup>509</sup> Salah El Serafy, 'Sustainability, income measurement and growth' in Robert Goodland, Herman Daly, Salah El Serafy and Bernd von Droste, *Environmentally Sustainable Economic Development: Building on Brundtland* (UNESCO 1991) 60.

<sup>510</sup> Ayres and Kneese, 'Production, Consumption and Externalities', above n 192, 288. The authors cite (at 284) F. Smith, *The Economic Theory of Industrial Waste Production and Disposal* (draft doctoral dissertation, North Western University, 1967) as the first to express the idea of applying materials balance concepts to waste disposal problems, but as this work is unpublished it is appropriate to attribute the argument to Ayres and Kneese. Note that the authors use the terms 'inventories' and 'capacity to absorb' where the term 'stocks' might now be used.

<sup>511</sup> See Irving Fisher, 'What is Capital?' (1896) 6 *The Economic Journal* 509, 514; Irving Fisher, *The Nature of Capital and Income* (MacMillan, 1906), especially at 52–53, 254–255.

accounting was a financial rather than economic tool. Accounting for the economy, *national accounting*, was a product of the need to measure (and so to manage) the output of the economy in support of policy responses to major new economic phenomena in the 20<sup>th</sup> century: the Great Depression of the 1930s and total mobilisation of production and management of consumption during World War II.<sup>512</sup>

The implication of the ‘materials balance’ approach was that externalities ‘cannot be properly dealt with by considering environmental media such as air and water in isolation’, but this raised another difficulty:

While we feel that it represents reality with greater fidelity than the usual [partial equilibrium] view, it also implies a central planning problem of impossible difficulty, both from the standpoint of data collection and computation.<sup>513</sup>

Despite their concerns about the impossibility of turning theory into practice, Kneese and Ayres, with d’Arge, went on to develop a ‘materials balance – general equilibrium’ approach that would be ‘a more or less complete accounting of materials flow for the area’.<sup>514</sup> This would facilitate both the pricing of environmental resources and trade-off decisions among discharges, allowing the setting of environmental standards and leaving optimality to be achieved within these ‘fixed constraints’ that would operate alongside the ‘natural constraints’ of resource scarcity.<sup>515</sup> The next step would be to use ‘economic base-input-output’ models to project future activity, population growth and other parameter changes, creating, in essence, what would now be described as a modelling application of environmental-economic accounts. At about the same time, Nordhaus and Tobin were approaching a somewhat similar conclusion from the opposite direction. Concerned about the shortcomings of economic growth as an indicator of economic welfare, they argued

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<sup>512</sup> See Jane Gleeson-White, *Double Entry* (Allen & Unwin 2011) 180–181. Discussing, at the beginning of World War II, how much of the economic ‘cake’ would remain for civilian consumption after paying for the war effort, Keynes commented that ‘[t]he statistics from which to build up these estimates are very inadequate. Every government since the last war has been unscientific and obscurantist, and has regarded the collection of essential facts as a waste of money there is no one today, inside or outside government offices, who does not mainly depend on the brilliant private efforts of [academic economist and statistician] Mr Colin Clark ...’: John Maynard Keynes, *How to Pay For the War* (MacMillan, 1940) 13.

<sup>513</sup> Ibid 295. This was not unlike the argument of Hayek, that ‘all the details of the changes constantly affecting the conditions of demand and supply of the different commodities can never be fully known, or quickly enough be collected and disseminated, by any one center.’ However, Hayek was making an argument in support of a normative principle of decentralisation: see F A Hayek, *The Road to Serfdom*, (Fiftieth Anniversary Edition, University of Chicago Press 1994 [1944], 55.)

<sup>514</sup> Allen V Kneese, Robert U Ayres and Ralph C d’Arge, *Economics and the Environment: A Materials Balance Approach* (Resources for the Future, 1970), 109. This is discussed further in 4.3.

<sup>515</sup> Ibid 110.

for measures of economic welfare that treated capital consumption as an item to be subtracted; this extended to 'environmental capital'.<sup>516</sup>

### *Emergence of Environmental Accounting*

Initially, the UN Statistical Office had been as concerned as Ayers and Kneese about measuring the impact of environmental degradation on economic welfare, concluding in 1977 that considerable conceptual and measurement problems meant that estimating the costs of reaching environmental standards or of assessing environmental damage was not a matter for routine statistics but for research and experiment.<sup>517</sup> Statistical efforts would be better directed to standardisation.<sup>518</sup> By 1983 optimism had grown to the point that UNEP and the World Bank initiated a series of workshops 'to revise national income calculations in order to reflect in them environmental concerns'.<sup>519</sup> Progress was not quick. According to El Serafy, it was not until 1988 that a watershed consensus was reached that the increasing importance of natural resources and environment was such that 'a set of environmental satellite accounts needed to be elaborated and attached to the new SNA core accounts, with a view of reflecting environmental considerations'.<sup>520</sup> This of course involved conceiving of the interaction of the economy and the environment as a single system of stocks and flows, with natural stocks being analogous to capital in conventional accounting. Thus the metaphor of 'natural capital' was born, although one scholar, Victor, soon cautioned about the limits of this analogy (see section 3.7.1).<sup>521</sup>

The UN continued to develop environmental accounting, publishing a working paper in 1989 and a preliminary draft handbook for a system of environmental-economic accounts as an appendix to the SNA, in 1990.<sup>522</sup> With the inclusion in Agenda 21 of

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<sup>516</sup> Nordhaus and Tobin, 'Is Growth Obsolete?', above n 189, 1, 5–6, 49. While the extensive literature on the limits of GDP as the headline indicator of economic growth that followed Nordhaus and Tobin is beyond scope, see Diane Coyle, *GDP: A Brief but Affectionate History* (Princeton University Press, 2014).

<sup>517</sup> United Nations Statistical Office, 'The Feasibility of Welfare-Oriented Measures to Supplement the National Accounts and Balances: A Technical Report', Studies in Methods, Series F No 22, (UN 1977) 54.

<sup>518</sup> Ibid.

<sup>519</sup> El Serafy, above n 509 60.

<sup>520</sup> Ibid 61.

<sup>521</sup> See Herman E Daly, 'On Sustainable Development and National Accounts' in David Collard, David W Pearce and David T Ulph, *Economics, Growth and Sustainable Environments: essays in memory of Richard Lecomber* (MacMillan, 1988); Salah El Serafy, 'The Environment as Capital' in Robert Costanza (ed), *Ecological Economics: The Science and Management of Sustainability* (Columbia University Press, 1991) 168. Note that the Brundtland Report (1987) made several references to 'ecological capital': WCED, n 7 above, 52. By implication, scholars have also criticised GDP as an inadequate measure of economic performance, and *a fortiori*, of welfare. The now-significant literature on this topic is beyond scope here, but Daly's article is an early example.

<sup>522</sup> Peter Bartelmus, *Sustainable Development, a Conceptual Framework*, Working Paper number 13 (Department of International Economic and Social Affairs, United Nations, 1989); Peter Bartelmus, C Stahmer and J van



recommendations for the development of systems of integrated environmental and economic accounting, the UN went on to develop the SEEA into a full international statistical standard, publishing early versions as guidance documents in 1993 and 2003 and a standard in 2012.

The OECD also showed early signs of engaging with environmental accounting as it began to emerge in the 1980s. Member governments had committed in 1979 to ‘endeavour[ing], to the extent practical, to develop systems to account for changes in environmental quality and related resource stocks’<sup>523</sup> and extended this commitment in 1985 to:

improve the management of natural resources, using an integrated approach, with a view to ensuring long-term environmental and economic sustainability. For this purpose, they will develop appropriate mechanisms and techniques including more accurate resource accounts ...<sup>524</sup>

This early support appeared to wane somewhat; an OECD workshop nearly a decade later concluded only that the OECD should continue to ‘continue to provide a forum for the exchange of views’ on accounting.<sup>525</sup> While it has since recommended that members improve information on material flows and link environmental and economic information through work on stocks and flows, including on ‘macro-economic aspects of environmental policies’,<sup>526</sup> the OECD has put more emphasis on developing environmental information tools than on advocating particular approaches to information.<sup>527</sup>

### *Early Discussion of Environmental Accounting in Australia*

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Tongeren, *Integrated Environmental and Economic Accounting: framework for an SNA satellite system* (1991) 37 *Review of Income and Wealth*, 111.

<sup>523</sup> OECD, ‘Declaration on Anticipatory Environmental Policies’, above n 396.

<sup>524</sup> Organisation for Economic Cooperation and Development (Council), ‘Declaration on Environment: Resource for the Future’, Decision C(85)111 of 20 June 1985, in *Environment: Resource for the Future* (OECD, 1985).

<sup>525</sup> Organisation for Economic Cooperation and Development, ‘Environmental Accounting for Decision-Making’, OECD Working Papers Vol III No 65 (OECD 1995) 11.

<sup>526</sup> Organisation for Economic Cooperation and Development, ‘Recommendation of the Council on Material Flows and Resource Productivity’ 21 April 2004, Decision C(2004)79 (OECD 2004) [4].

<sup>527</sup> The OECD has also continued to refine the PSR model used in SoE reporting as a common reference framework and has undertaken a significant program of work on environmental indicators: see for example Organisation for Economic Cooperation and Development, *Environmental indicators. OECD core sets*. (OECD, 1994); Organisation for Economic Cooperation and Development, *Environmental Indicators: Towards Sustainable Development* (OECD 2001); Organisation for Economic Cooperation and Development, *Green Growth Indicators* (OECD 2014). The OECD has also participated in work led by the UN in developing the System of Environmental-Economic Accounts (SEEA), discussed below.

Australia's early interest in environmental accounting waxed then waned. In the mid-1980s Australia championed a broadening of the OECD's environmental work to include natural resources management. This in turn included the management of these resources as a form of capital. The Australian minister attending the OECD Environment Committee at Ministerial Level pursued a theme of natural resources as natural capital:

To our cost, we have given inadequate attention to the need for an environmentally and economically integrated approach to the management of natural resources, or 'natural capital' ...

...

We are all aware of the links between the health of our economies and the health of the natural resource capital on which they are based. When natural resources are used without due regard for the broader significance of such use, medium and longer-term problems affecting economic stability can arise. There are many cases throughout the world where acute degradation of land and water resources has removed the very basis of economic growth.<sup>528</sup>

Subsequently, the Environment Ministerial Council sponsored a visit to Australia in 1986 by Dr Robert Repetto of the World Resources Institute to stimulate discussions between Australian governments of the potential applications of 'natural resource accounting' in integrating resource and environmental matters directly with economic development.<sup>529</sup> The Council published two papers by Repetto, one reporting on public seminars and discussions with officials.<sup>530</sup> This paper noted that 'there seemed to be a general consensus, although not unanimity, on the desirability of moving ahead with some initial steps toward natural resource accounting in Australia ...' and recommended 'a sequence of case studies in natural resource accounting leading toward a state-wide set of resource accounts' to be undertaken in cooperation with the Commonwealth and indeed the AEC more generally.<sup>531</sup> Despite noting that the incremental cost of constructing accounts would be relatively

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<sup>528</sup> Ralph Willis, 'Natural Resource Management', statement to Organisation for Economic Cooperation and Development Environment Committee Meeting at Ministerial Level, in OECD, *Environment: Resource for the Future, Selected Statements and Documents from the OECD Environment Committee's Meeting at Ministerial Level* Paris, 18–20 June 1985 (OECD Paris 1985) 22.

<sup>529</sup> Department of Arts, Heritage and Environment, 'Project Brief for a Consultancy', 30 July 1986, (Department of Arts, Heritage and Environment Department file 86/3254).

<sup>530</sup> Repetto, *Report on natural resource accounting: Information paper on the use of natural resource accounting for countries with natural resource-based economies and potential first steps in Australia*, above n 465.

<sup>531</sup> Ibid 22.

small, the matter was not pursued further at a national level until the ESD initiatives of 1992.<sup>532</sup>

#### **4.3.2 Increasing General Instrumentalism as Sustainability Policies Emerge in Australia**

Recall from chapter three that in 1987 that Primary Industries Minister Kerin, frustrated at policy and information inadequacies concerning land-use decisions in environmentally sensitive areas, secured Cabinet agreement that he and the environment minister should develop recommendations for policy frameworks. When the matter returned to Cabinet the ministers raised information as a significant issue, arguing that inadequate information on Australia's biological and physical resources 'acts as a constraint on informed decisions on land use'.<sup>533</sup> The proposed approach was a straightforward instrumental one however:

It is also important that specific land use decisions ... be accompanied by the collection and analysis of as much information as possible related to the resources, including environmental values, of the area in question before decisions are taken.<sup>534</sup>

Cabinet decided to establish a National Forest Inventory and that the environment minister should review environmental databases, with a view to filling 'identified gaps'.<sup>535</sup> Although the environmental databases review was subsequently overtaken by the 1989 Statement and did not go to Cabinet, the environment department had nevertheless prepared a draft Cabinet submission, which gives an insight into the views and frustrations of senior officials and possibly the Minister (if the draft was prepared to reflect his views) about environmental data.<sup>536</sup> As the draft put it, although there was a large amount of environmental data in Australia, it was 'not useable for the specific purposes of decision makers', and until it was, 'the demands of industry, the trade unions and the environment movement, the Treasurer and the Minister for Industry and Commerce for a clear

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<sup>532</sup> Note that Victoria has maintained its interest in accounts. Dr Repetto's visit was also under consultancy to Victoria and that State has since published a number of environmental accounting reports.

<sup>533</sup> Australian Government, 'Conservation/Heritage and Resource Assessment/Development', *Cabinet Submission 6124*, above n 305 4.

<sup>534</sup> *Ibid* 5.

<sup>535</sup> *Cabinet Minute (Amended) No 12025 of 1988*, above n 305, 3–4. The decision to establish a National Forest Inventory appears to be a response to the high level of controversy associated with forests at this time rather than a response to any analysis against criteria such as information availability.

<sup>536</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, First Assistant Secretary Natural Environment Division, 'Establishing an Environmental Information Program to Implement the National Conservation Strategy for Australia (NCSA)', Attachment to Submission to Portfolio Minister, No 7873 of 4 April 1989 (Department of the Arts, Sport, the Environment, Tourism and Territories file 89/3853).

government policy on environmental guidelines and assessments' could not be met.<sup>537</sup>

Citing the success of the Australian Biological Resources Survey in integrating taxonomic data from museums and herbaria around the country, the submission proposed an Environmental Information Program, a 'national framework within which environmental data can be collected, described and classified in a comparable and consistent manner' that would allow users to 'respond to development proposals as they arise'.<sup>538</sup> The focus would be on biological data; inter- and intra-governmental data sharing and cooperation; on 'expert systems' and on the production of 'environmental profiles'.<sup>539</sup> Interestingly, while emphasising data-gathering, the draft submission also acknowledged the need for a 'rigorous conceptual framework', but did not propose one.<sup>540</sup>

In the 1989 Statement the Government announced the establishment of an Environmental Resource Information Network (ERIN). This network was said to build on the recently established Natural Resource Information Centre (NRIC) in the Primary Industries portfolio that was already preparing the forests inventory. It was to be linked to the ABRS, with the objective of 'assessing and integrating' data through geographical information systems (GIS) and in collaboration with states.<sup>541</sup> Betraying the lack of policy work behind the 1989 Statement, it talked glibly of 'co-operation' and 'collaboration' while glossing over the internal divisions that had seen NRIC, with its resource focus, established in the resources portfolio, while ERIN, with its natural environment focus, was placed in the environment portfolio.<sup>542</sup> This problem was greatly exacerbated by the federal factors — the States held much of the information needed by the Commonwealth to support its increasing national role in environment and this was a unilateral policy statement. Moreover, as officials later advised Cabinet, States were reluctant to provide information (without payment, if at all) because it strengthened the Commonwealth's arm in environmental issues.<sup>543</sup> The issue was so significant that arrangements for the sharing of natural resource information was one of the topics raised at the Special Premiers' Conference in 1990 under Prime Minister Hawke's 'new federalism' initiative discussed in

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<sup>537</sup> Ibid [2].

<sup>538</sup> Ibid [2], [5], [6].

<sup>539</sup> Ibid [7], [10].

<sup>540</sup> Ibid Attachment B, [15].

<sup>541</sup> Hawke, *1989 Statement*, above n 325, 11–12.

<sup>542</sup> Ibid 7, 13.

<sup>543</sup> See Australian Government, 'Commonwealth-State Relations Initiative: Arrangements for the Exchange and Sharing of Natural Resource Information' *Cabinet Submission* 7458; decision recorded in *Cabinet Minute* 14516 of 8 October 1990 (NAA A14039, 7458), especially [5–8].

3.3.4. This in turn would lead to the inclusion in intergovernmental agreements of provisions for the sharing of environmental information (see below).

At this point, the focus on information measures remained instrumental. The environment department's annual report subsequently elaborated on the objectives of ERIN, explaining that these included establishing 'a framework for assessing policy and management implications of environmental change or of particular actions involving environmental resource use.'<sup>544</sup> While this suggests that officials were turning their minds to information frameworks, in fact Cabinet, in taking funding decisions in support of the 1989 Statement, had rejected the environment minister's funding proposals for State of the Environment reporting, including 'promotion of natural resource accounting and the development and use of environmental indicators' and an 'inventory of Australia's biodiversity by 2001'.<sup>545</sup>

## 4.4 Environmental Information Initiatives in Pursuit of Sustainability Goals

Despite receiving limited attention in the Brundtland Report, momentum for information policy initiatives built in the lead-up to the Rio Conference, and the topic ultimately featured significantly in Agenda 21. This appears to have influenced Australian policy, which by 1992 was also giving prominence to policy on informing systems. Implementation however would remain weak.

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<sup>544</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, *Annual Report 1989–1990* (AGPS 1990), 194.

<sup>545</sup> *Cabinet Minute 12754*, 15 June 1989 (NAA 14039, 6533). The Government decided to provide funding for an environmental database but did not endorse a proposal entitled 'State of the Environment — Auditing and Reporting' and which included 'promotion of natural resource accounting and the development and use of environmental indicators' or a proposal entitled 'Inventory of Australia's Biodiversity by 2001' — see Attachments U and V to Australian Government, 'Environmental Initiatives', *Cabinet Submission 6533*, 9 June 1989 (NAA 14039, 6533). Shortly after this the Prime Minister requested a report from the Australian Science and Technology Council on environmental research. The Council's 1990 report confirmed the parlous state of environmental information, recommending a system of national long-term monitoring and research sites to identify environmental change, long-term baseline research 'to support development of national [environmental] quality standards', and the establishment of 'nationally-accessible primary environmental data sets': see Australian Science and Technology Council, Environmental Research Working Party, *Environmental research in Australia: The Issues* (AGPS 1990) recommendations 4, 5. The report did not elicit a formal government response.

#### 4.4.1 Impact of Sustainable Development on Approaches to Environmental Information

Even though devoting relatively little space to environmental information, in the context of its recommendations for policy integration, the Brundtland Report made a radical proposal (though in muted language) not only to progress environmental accounting, but hinting also at what might be described as 'environmental budgeting':

Where resources and the data permit, an annual report and an audit on changes in environmental quality and in the stock of the nation's environmental resource assets are needed to complement the traditional annual fiscal budget and economic development plans. These are essential to obtain an accurate picture of the true health and wealth of the national economy, and to assess progress towards sustainable development.<sup>546</sup>

If it was not clear that this was a call for a new approach to decision-making, immediately before the Rio Conference the WCED reconvened and issued a statement calling for a number of 'clear and unavoidable' next steps to be taken at Rio, including the following:

Our economic accounting systems are deeply flawed. They have no accounts for environmental capital. No business could survive without a capital account. Neither can the planet. The United Nations, the World Bank, OECD, and the global agencies should bring in new international standards of national economic accounting not later than 1995. These reforms will instil a concern for environmental resources in all offices and ministries of government, and thus merge environment and economics in decision-making. Rio should begin this process.<sup>547</sup>

Perhaps heeding this call, Agenda 21, the plan adopted at Rio, paid significant attention to environmental information. Chapter 40 of Agenda 21, 'Information for Decision Making', is devoted to environmental information and takes an instrumentalist approach, advocating for example improved data standards and accessibility.<sup>548</sup> More significantly however, chapter 8, 'Integrating Environment and Development in Decision-Making', places better environmental information into a broader context of better, and specifically, integrated,

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<sup>546</sup> WCED, above n 7, 314. A footnote to this passage cited a Statistics Canada paper on natural resource and environmental accounting: T. Friend, 'Natural Resource Accounting and its Relationship with Economic and Environmental Accounting', Statistics Canada, Ottawa, September 1966 [*sic* — the correct date is 1986].

<sup>547</sup> World Commission on Environment and Development, 'Statement', London, 22–24 April 1992 (WCED 1992), 4.

<sup>548</sup> See *Agenda 21*, above n 282, Chapter 40, Note that the Rio Declaration did not deal with environmental information, other than Principle 10, which endorsed the right of access by citizens to environmental information.

decision-making. The chapter promotes integrated decision-making, including through ‘systems of integrated environmental and economic accounting’, which would:

better measur[e] ... the crucial role of the environment as a source of natural capital and as a sink for by-products generated during the production of man-made capital and other human activities ...<sup>549</sup>

The underlying rationale was that:

[P]revailing systems for decision-making in many countries tend to separate economic, social and environmental factors at the policy, planning and management levels. This influences the actions of all groups in society ... and has important implications for the efficiency and sustainability of development.<sup>550</sup>

The inclusion of this call for accounting systems in Agenda 21 provided a mandate for the UN, in partnership with the OECD and other international organisations, to develop what would become the SEEA (see 4.4.4).

#### **4.4.2 Environmental Information Initiatives in Support of ESD Initiatives in Australia**

Beyond the Rio Conference, 1992 was also a major year for environmental policy in Australia. All four of the major domestic policy initiatives of that year contained environmental information initiatives. By that time, the PSR framework for SoE reporting was well established and the Australian Bureau of Statistics (ABS) had begun an active engagement with environmental information. The scene appeared to be set in Australia for a comprehensive effort in support of its new sustainability goals. Yet this did not occur. The remainder of this chapter seeks to chronicle the various developments before analysing why the overall outcome was policy failure.

##### *Australian Bureau of Statistics Assumes a Role in Environmental Information*

In 1990, in the wake of the government’s decision to develop the NSESD, the ABS had established an Environment and Natural Resource Statistics Unit and offered its services to

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<sup>549</sup> UNCED, *Agenda 21*, above n 282, [8.41].

<sup>550</sup> Ibid [8.2].

the ESD Working Group process.<sup>551</sup> In the same year it published a 'feature article' on environmental accounting to accompany the National Accounts in 1990, noting the advantages of environmental satellite accounts and foreshadowing further work, given its recognition of 'the growing need for a comprehensive means of assessing whether or not the current rate of economic development is sustainable in the longer term'.<sup>552</sup>

The Bureau's first environment-specific statistical publication was a statistical compendium, based on the FDES.<sup>553</sup> In that compendium, the ABS foreshadowed a significant future work program covering environmental accounting; environmental indicators; the development of an environmental data series; and the development of environmentally relevant geographic regions, along with collaboration on State of the Environment reporting and ESD projects more generally.<sup>554</sup> By 1992, ongoing work included statistical frameworks, data sources, and the identification of appropriate regions to be used for environmental analysis.<sup>555</sup> A complete list of ABS environment-specific statistical publications is at Appendix 7.

*The Intergovernmental Agreement on the Environment (IGAE) and the National Strategy for Ecologically Sustainable Development (NSED)*

Although the IGAE was concerned primarily with federal roles and responsibilities, one exception was the link made in the fourth recital between ESD and resource accounting, that the parties:

RECOGNISE that the concept of ecologically sustainable development *including proper resource accounting* provides potential for the integration of environmental and economic considerations in decision-making and for balancing the interests of current and future generations ...<sup>556</sup>

However, with the problem (the need for policy integration) and solution (resource accounting) thus recognised, the agreement failed to make further provision in relation to

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<sup>551</sup> Australian Statistician, Letter to Professor Stuart Harris, Chair, ESD Working Group, 22 November 1990 (Department of the Arts, Sport, Environment, Tourism and Territories file 87/6709).

<sup>552</sup> Australian Bureau of Statistics, 'Natural Resource and Environmental Accounting in the National Accounts', Feature Article, in *March Quarter 1990 Australian National Accounts: National Income and Expenditure*, ABS Catalogue No 5206.0 (ABS, Canberra, 1990).

<sup>553</sup> Australian Bureau of Statistics, *Australia's Environment: Issues and Facts*, ABS Catalogue Number 4140.0 (Australian Bureau of Statistics, 1992) ix.

<sup>554</sup> Ibid ch 7, 'Where to from here?'

<sup>555</sup> Ibid 343–346.

<sup>556</sup> IGAE, above n 370, fourth recital (italics added).



‘proper resource accounting’, instead dealing with data collection, standards and directories.<sup>557</sup> The NSESD followed the IGAE later in 1992. It is the subject of a case study in chapter five but it took the opposite approach to the IGAE on environmental information. An unambitious incremental ‘strategic approach’ provided that:

Efforts will focus on improving data collections and coordination, maximising the availability and use of existing data and activities, clearly identifying user needs and coordinating activities between different levels of government to avoid overlap and duplication ...<sup>558</sup>

while in relation to ESD-related data, governments would work towards ‘full resource accounting’, including ‘continu[ing] the long-term development of satellite or supplementary accounts to the Australian National Accounts’, working on ESD indicators and introducing regular national state of the environment reporting.<sup>559</sup>

#### *Implementation of IGAE and NSESD Provisions on Environmental Information*

Under the IGAE, although data was to be more accessible across all levels of government and the private sector, there was no clear path or requirement to implementing this. Rather, implementation was left for another day: ‘the circumstances in which the exchange and ongoing sharing of data is appropriate’, including ‘appropriate financial arrangements’, were to be the subject of a further agreement.<sup>560</sup> A review of the IGAE in 1995 found that a draft national policy on the exchange of land-related data had not been completed. As jurisdictions were unable to reach consensus on a subsequent draft, the Australian and New Zealand Land Information Council published a policy in 1999 that included principles on data transfer, which ‘all jurisdictions undertook to strive to implement.’<sup>561</sup> Essentially, the information sharing provisions of the IGAE were left to ad hoc or bilateral initiatives.

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<sup>557</sup> Ibid, Schedule 1, ‘Data Collection and Handling’.

<sup>558</sup> IGAE, above n 370, Part 14, ‘Natural Resource and Environment Information’, para 2.

<sup>559</sup> See Objective 14.2; see also the reference to ‘indicators of ecological sustainability’ in Objective 30.5. Note that the strategy also called-up the commitments in the IGAE to ‘improve the consistency and comparability of environmental data’: see Objective 30.4.

<sup>560</sup> IGAE, above n 370, Sch 1 cl 3.

<sup>561</sup> Intergovernmental Committee on Ecologically Sustainable Development (ICESD), *Report to The Council of Australian Governments on the Review of the Intergovernmental Agreement on the Environment* (ICESD, 1995), 5; Australian Surveying and Land Information Group, *Submission to the Productivity Commission Cost Recovery Inquiry*, <[http://www.pc.gov.au/inquiries/completed/cost-recovery/submissions/australian\\_surveying\\_and\\_land\\_information\\_group/\\_sub044.pdf](http://www.pc.gov.au/inquiries/completed/cost-recovery/submissions/australian_surveying_and_land_information_group/_sub044.pdf)> (viewed 28 June 2016) [7]–[8].

The story was no better in relation to the NSESD. Progress under the NSESD was reviewed in 1993 and 1995. Apart from generalities and sectoral or state-based activities, the 1993 report relevantly noted only progress in work by ABS in developing environmental satellite accounts.<sup>562</sup> The 1995 review did not address environmental information.<sup>563</sup> In essence, the 'strategic approach' of the NSESD to information was not implemented; instead, the ABS continued the slow development of environmental accounting, moving with international developments as discussed below but apparently without any parallel efforts in the rest of government to integrate emerging accounting frameworks with decision-making processes.

#### *Return of State of the Environment Reporting and National Forest Information Initiatives*

Despite the failure to implement the information components of the IGAE and NSESD, governments did pursue (separately) several major information initiatives at this time that incorporated information or reporting frameworks.<sup>564</sup> In his 1992 Environment Statement ('1992 Statement'),<sup>565</sup> Prime Minister Keating made a new commitment to regular SoE reporting and the Government released a discussion paper on the development of a national state of the environment reporting system.<sup>566</sup> The SoE reporting framework subsequently adopted in 1994 adopted the OECD PSR model; broader objectives adopted included regular reporting; facilitating an agreed set of national environmental indicators; and contributing to assessment of progress towards ESD.<sup>567</sup> Subsequently, in 1995 ANZECC established a National Environmental Indicators Taskforce to develop a core set

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<sup>562</sup> Intergovernmental Committee on Ecologically Sustainable Development, *Summary Report on the Implementation of the National Strategy for Ecologically Sustainable Development* (ICESD 1993), <<http://www.environment.gov.au/archive/esd/national/nsesd/summary93/part3.html#Info>> (viewed 28 June 2016) [14], 'Natural Resource and Environment Information'.

<sup>563</sup> See Intergovernmental Committee on Ecologically Sustainable Development, *Summary report on the implementation of the national strategy for ecologically sustainable development (1993–1995)* (ICESD 1996).

<sup>564</sup> The government also continued to announce one-off data-gathering initiatives such as the Monitoring River Health initiative announced in the 1992 Environment Statement and the 1995 publication Leon P Zann et al, *State of the Marine Environment* (Great Barrier Reef Marine Park Authority for DEST 1995) (SOMER). 'The objective for SOMER is to provide baseline information on the state of Australia's marine environment. This will assist in establishing priorities for action as part of the national marine conservation strategy.' (Department of the Arts, Sport, the Environment, Tourism and Territories, 'Progress on State of Marine Environment Report (SOMER)', Brief 6115 to Minister, 15 April 1992 (Department of the Arts, Sport, the Environment, Tourism and Territories file 92/996).

<sup>565</sup> Paul Keating, 'Australia's Environment: A Natural Asset, Statement on the Environment, 21 December 1992, Adelaide' (Australian Government 1992) ('1992 Statement'). This Statement is considered in more detail in chapter three.

<sup>566</sup> Commonwealth Environment Protection Agency, *Development of a National State of the Environment Reporting System: Discussion Paper* (Commonwealth Environment Protection Agency 1993).

<sup>567</sup> Department of the Environment, Sport and Territories, *State of the environment reporting: framework for Australia* (DEST 1994) 1, 12, 15.

of SoE indicators (subsequently published in 2000).<sup>568</sup> The National Forest Policy Statement of 1992 also addressed information in a substantive manner. The statement, in which the governments of Australia adopted 'a vision of ecologically sustainable management of Australia's forests',<sup>569</sup> continued the National Forest Inventory and included a commitment to publish a five-yearly State of the Forests Report from 1998.<sup>570</sup> The reports, which continue to be published, are based on collated forestry data supplied by the States.<sup>571</sup>

### *Continued Development of Environmental Accounts*

In 1993 the UN published the first international handbook on environmental accounting (now known as SEEA 1993).<sup>572</sup> This facilitated the integrated presentation and analysis of environmental and economic information, although few countries sought to implement it.<sup>573</sup> Domestically, the Government allocated funding to the ABS in 1995 to produce a number of component environmental accounts linked to the national accounts and a discussion paper 'System of Environmental Accounts for Australia'.<sup>574</sup> The ABS thus

<sup>568</sup> Department of the Environment, Sport and Territories, 'Information for Decision-making and Earthwatch', Brief for Commission on Sustainable Development, 3<sup>rd</sup> Meeting, 11–28 April 1995, (Department of the Environment, Sport and Territories file 96/476). In the same year ICESD also did a survey to identify indicators with a focus on ESD: Intergovernmental Committee on Ecologically Sustainable Development, 'Survey of Work on Indicators of ESD' (ICESD 1995). (This document was originally published on <[http://www.dpie.gov.au/dpie/cpd/survey\\_indicators.html](http://www.dpie.gov.au/dpie/cpd/survey_indicators.html)>, but is no longer available. The writer obtained a copy from Department of the Environment, Sport and Territories file 95/02420).

<sup>569</sup> Council of Australian Governments, 'National Forest Policy Statement' (COAG 1992) 3.

<sup>570</sup> Ibid 12. The commitment to produce the report was subsequently given statutory support through s 10A of the *Regional Forest Agreements Act 2002* (Cth):

#### **Source of forestry information**

- (1) The Minister must cause to be established a comprehensive and publicly available source of information:

- (a) for national and regional monitoring and reporting in relation to all of Australia's forests;

and

- (b) to support decision-making in relation to all of Australia's forests.

<sup>571</sup> The most recent report, Montreal Process Implementation Group for Australia and the National Forest Inventory Steering Committee, *Australia's State of the Forests Report 2013* (Department of Agriculture 2013) is the fourth in the series.

<sup>572</sup> United Nations, *Integrated Environmental and Economic Accounting, Handbook of National Accounting Interim Version*, Series F, No 61 (UN 1993). The term System of Environmental-Economic Accounts was not used until the 2003 version of the handbook but has been applied retrospectively to this version.

<sup>573</sup> Robert Smith, 'Development of the SESA 2003 and Its Implementation' (2007) 61(4) *Ecological Economics* 592, 593; see also Organisation for Economic Cooperation and Development, 'Environmental Accounting for Decision-Making, Summary report of an OECD seminar' (OECD 1995) 7.

<sup>574</sup> John Faulkner, Minister for the Environment and Paul Elliott, Parliamentary Secretary to the Treasurer, 'Environment linked to national accounts', *Media Release*, 10 May 1995 (Office of the Minister for the Environment 1995), available at

<<http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;adv=yes;orderBy=customrank;page=0;qu>

began publishing limited sets of environmental accounts, in the first instance sectoral accounts for energy and experimental stock accounts of non-produced assets within the economic boundaries of the National Accounts, such as production timber.<sup>575</sup> The ABS pursued this work 'in line with international developments',<sup>576</sup> thus establishing a pattern of participating in international work to develop standards, while also releasing various sectoral (and later more comprehensive) accounts, a pattern that continues to this date. The accounts have grown in scope and frequency over the years, as can be seen in Appendix 7.

#### **4.4.3 Themes of Significant Investment and Measuring Progress Under Howard Government 1996–2007**

The replacement of one long-term government with another in 1996 coincided with the OECD's 1997 environmental performance review of Australia. The review gave limited attention to environmental information and devoted most of this limited effort to describing current information initiatives. Nevertheless, its conclusion, that environmental monitoring and data were 'often inadequate in terms of coverage and consistency' and that better data, indicators, monitoring and reporting' were necessary, is clearly significant as this was the first external review of Australia's environment policy.<sup>577</sup> As it happened, the incoming Howard government had committed to several significant information and reporting initiatives, but had also emphasised information frameworks in support of decision-making.

##### *National Land and Water Resources Audit*

The proposed National Land and Water Resources Audit (NLWRA) was intended to complement the SoE Report (which assembled, but did not generate, data) by providing the necessary baseline data for 'developing rigorous policy responses'.<sup>578</sup> The objectives of the audit were later enshrined in legislation (Box 4.1). The statutory objectives were a

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[ery=Decade%3A1990s%20faulkner%20elliott%201995%20national%20accounts%20environment%20Data%20set%3Apressrel;rec=0;resCount=Default>](#) (viewed 16 December 2016).

<sup>575</sup> Australian Bureau of Statistics, *Energy Accounts for Australia*, ABS Catalogue 4604.0 (ABS 1995); Australian Bureau of Statistics, *National Balance Sheets for Australia: Issues and Experimental Estimates*, ABS Catalogue 5241.0 (ABS 1995).

<sup>576</sup> Australian Government, 'Portfolio Budget Statements 1995–96, Treasury Portfolio', Budget Related Paper No 4.18 (Australian Government 1995) 77.

<sup>577</sup> Organisation for Economic Cooperation and Development, *Environment Performance Reviews: Australia* (OECD, Paris, 1998) 19, 144–145.

<sup>578</sup> Liberal Party of Australia, 'Saving Our Natural Heritage', Policy Statement (Liberal Party of Australia, 1996) 16.

variant of the stress-response model, taking the form of ‘state, cause, effect, response, evaluate’ and thus evincing an intention to build stronger connections between information and policy analysis.

### **12 Primary objectives of the National Land and Water Resources Audit**

For the purposes of this Act, the primary objectives of the National Land and Water Resources Audit are as follows:

- (a) to estimate the direct and indirect causes and effects of land and water degradation on the quality of the Australian environment and to estimate the effects of land and water degradation on Australia’s economy;
- (b) to provide a baseline for the purposes of carrying out assessments of the effectiveness of land and water degradation policies and programs.

#### **Box 4.1 Section 12, *Natural Heritage Trust of Australia Act 1996* (Cth)**

Other objectives of the program included:

...

(iii) developing a national information system of compatible and readily accessible land and water data;

(iv) ensuring integration with, and collaboration between, other relevant initiatives;

...

(vi) providing a framework for monitoring Australia’s land and water resources in an ongoing and structured way.<sup>579</sup>

In other words, the intention was to create an environmental information system that would be dynamic. As the responsible ministers put it:

The audit process should not be considered as a one-off exercise, nor in isolation from the other natural resource monitoring processes occurring throughout Australia. It is therefore important that the audit framework be developed to allow for its continual use and updating in order to lead to better decision-making at all levels of government and management.<sup>580</sup>

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<sup>579</sup> National Land and Water Resources Audit, ‘Guide to the National Land and Water Resources Audit’ (NLWRA 1998).

<sup>580</sup> John Anderson, and Robert Hill (ministers), letter to Dr Roy Green AO, Chair, National Land and Water Resources Audit Advisory Council, 22 December 1997 (Department of Primary Industries and Energy file 98-00906).

The audit had a relatively long life in Australian political terms of 12 years but nevertheless was abolished before it could achieve these aspirations. The audit published a number of significant reports, including assessments of Australia's water resources and of biodiversity.<sup>581</sup> The audit also developed extensive indicators and established several web-based sources and repositories for natural resources information — the Australian Natural Resources Atlas (later, Australian Resources Online) and the Australian Natural Resources Data Library.<sup>582</sup> As van Dijk et al conclude:

The NLWRA was arguably the first attempt to produce comprehensive nation-wide environmental information using the best available observation and analysis methods. It was unprecedented in its broad scope and contributed much to the understanding of Australia's natural resources, highlighted knowledge gaps, and helped to develop new analysis methods and data products.<sup>583</sup>

However, in its final report, the NLWRA included among its 'key learnings' a number of items suggesting that a great deal of work remained to be done if goals relating to comprehensive natural resource information were to be achieved. These included statements that 'significant further effort is urgently required to develop complete and robust datasets'; and 'Australia does not remain well placed to have the necessary information to deal effectively with the pressing environmental and natural resource management issues it faces'.<sup>584</sup> Stronger collaboration, with 'appropriate ongoing institutional arrangements' to 'promote and support coherent action to deliver an improved information infrastructure and sustain it in the long term' would be needed to deal with those issues.<sup>585</sup> One learning seems particularly apposite:

Public investment in natural resource management is increasingly driven by quantified and time-bound long term targets. By definition this investment philosophy requires baselines, long term data collection and the capacity for conditions to be assessed in the future and compared against baselines.<sup>586</sup>

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<sup>581</sup> See Natural Heritage Trust (Australia) and National Land & Water Resources Audit Australia, *Australian Water Resources Assessment 2000: Surface Water and Groundwater, Availability and Quality* (National Land and Water Resources Audit, rev ed, 2001); and Department of the Environment, Heritage and Water and National Land and Water Resources Audit, *Assessment of Australia's Terrestrial Biodiversity 2008* (Department of the Environment, Water, Heritage and the Arts, 2009).

<sup>582</sup> National Land and Water Resources Audit, *Australia's Natural Resources: 1997–2002 and Beyond* (NLWRA Canberra 2002) v.

<sup>583</sup> van Dijk et al, above n 438, 340.

<sup>584</sup> National Land and Water Resources Audit, *The National Land and Water Resources Audit 2002–08: Achievements and Challenges* (NLWRA, Canberra, 2008) ('*Achievements and Challenges*') 5–6.

<sup>585</sup> Ibid.

<sup>586</sup> Ibid 6.

In other words, informing systems should be enduring, to match enduring policy needs. Despite having earlier received similar advice from a Productivity Commission (PC) Inquiry,<sup>587</sup> these learnings were not acted on directly, although they are addressed partially for water by the *Water Act 2007* (Cth), which among other things requires the Bureau of Meteorology (BoM) to compile a water account.<sup>588</sup>

Ironically, despite sustained resourcing and effort over more than a decade, including the establishment of statutory objectives, the NLWRA left no operational institutions. As van Dijk et al put it:

[W]hen the NLWRA was finally concluded in 2008, it did not leave an operational information system and a considerable part of the information produced may already be considered out of date, although much of the knowledge and solutions developed have made their way into subsequent information products and systems.<sup>589</sup>

The NLWRA was simply allowed to lapse, with its final report (to which there was no government response) arguing that there was ‘an urgent need to task an appropriate body ... to pursue the vision of the Australian Natural Resources Information Infrastructure’, in which the NLWRA had been a major partner.<sup>590</sup>

The extent to which the NLWRA disappeared quickly from view can be seen in a 2010 report by the Senate Rural and Regional Affairs and Transport References Committee, *Natural Resource Management and Conservation Challenges*.<sup>591</sup> Even though the terms of reference for the inquiry included ‘the lessons learned from the successes and failures of three decades of Commonwealth investment in resource management’, the report made only one passing reference to the NLWRA,<sup>592</sup> before recommending, surprisingly, ‘an ongoing process of audit of the condition of Australia's natural resources’.<sup>593</sup> Equally

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<sup>587</sup> Productivity Commission, *Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies* (PC 1999), discussed later in this section.

<sup>588</sup> *Water Act 2007* (Cth), s 120. See also the water information object in s 3(h) of the Act.

<sup>589</sup> van Dijk et al, above n 438, 340.

<sup>590</sup> National Land and Water Resources Audit, *Achievements and Challenges*, above n 584 6. Note that the Water Account compiled by the Bureau of Meteorology under the *Water Act*, and related publications such as the *Australian Water Resources Assessment* (Bureau of Meteorology 2010, 2012) in many respects filled the gap left by the NLWRA, in relation to water, but the assessment was discontinued 2013.

<sup>591</sup> Parliament of Australia, Senate Rural and Regional Affairs and Transport References Committee, *Natural Resource Management and Conservation Challenges* (Department of the Senate, 2010).

<sup>592</sup> *Ibid* 13.

<sup>593</sup> *Ibid*, recommendation 9, page 73.

surprisingly, in its formal response, the Government made no mention of the NLWRA, instead agreeing in principle to the recommendation and 'acknowledg[ing] the need to establish a better system of environmental monitoring ...' and going on to refer to the National Plan for Environmental Information announced in the 2010–2011 Budget.<sup>594</sup> It was as if the NLWRA had sunk without trace, another example of policy amnesia.

### *State of the Environment Reporting*

The new government continued the SoE initiative announced in 1992, publishing in 1996 the first of what has become an ongoing series of state of the environment reports, with SoE reporting subsequently made a statutory obligation in 1999.<sup>595</sup> The Government also continued the development of a national set of core indicators in 2000, describing this as the next logical step.<sup>596</sup> Despite commitments to integrated approaches, the government continued to undertake one-off information initiatives, such as the Australian River Assessment Scheme and the National Wilderness Inventory.<sup>597</sup>

### *Sustainability Reporting*

In 1992 the NSESD had committed governments to developing an initial set of sustainability indicators for ESD.<sup>598</sup> Little had been done since.<sup>599</sup> The environment

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<sup>594</sup> Commonwealth, *Parliamentary Debates*, Senate, 3 March 2011, 1138 (Senator Lundy, Parliamentary Secretary to the Prime Minister, concerning Rural and Regional Affairs and Transport References Committee, 'Natural Resource Management and Conservation Challenges: Australian Government response to recommendations').

<sup>595</sup> State of the Environment Advisory Council, *Australia: State of the Environment 1996* (CSIRO Publishing, 1996); *EPBC Act* s 516B. The section provides for the making of regulations concerning State of the Environment reporting, but no regulations have been made.

<sup>596</sup> Robert Hill, Minister for the Environment, *Investing in Our Natural Heritage: A statement by Senator the Honourable Robert Hill 20 August 1996*, Portfolio Budget Statements 1996–1997, Environment, Sport and Territories Portfolio, Budget Initiatives and Explanations of Appropriations 1996–97, Budget Related Paper No 1.5 (Department of the Environment, Sport and Territories 1996), 26. The core indicators were published subsequently in 2000: see ANZECC State of the Environment Reporting Task Force, *Core Environmental Indicators for Reporting on the State of the Environment* (ANZECC 2000).

<sup>597</sup> Department of the Environment, Sport and Territories, *Annual Report 1996–97*, 33; Department of the Environment *Annual Report 1997–98*, 20. As might be expected, incremental improvements saw milestones passed from time to time. For example, by 1996 data had reached the point where maps under the Comprehensive Regional Assessment Program could be used for Cabinet, while in the same year an Environmental Data Directory was completed to national standards: see Department of the Environment, Sport and Territories, *Annual Report 1995–96* at 34–35.

<sup>598</sup> NSESD, above n 354, Objective 14.1.

<sup>599</sup> The Australian Bureau of Statistics has produced a publication on sustainable agriculture: see Australian Bureau of Statistics, 'Sustainable Agriculture in Australia, 1993–94', Item 4606.0 (ABS 1994). The review of the implementation of the NSESD in 1996 also reported the development of indicators for sustainable agriculture and work on reporting against those indicators was the underway within the Government: see Intergovernmental Committee for Ecologically Sustainable Development, *Summary Report on the Implementation of the National Strategy for Ecologically Sustainable Development* (1993–1995), above n 563.



department briefed Minister Hill on 'Indicators of Sustainable Development' in 1998.<sup>600</sup> The brief explained that separate indicators are the principal type used because integrating and/or weighting information to produce composite measures is scientifically difficult and could prove inflexible. One integrated approach, 'green' national accounts, was 'still in its infancy'. Even with the 'relatively simple approach' of producing individual indicators, there were 'a number of problems', including significant data gaps and limited coordination, with various agencies producing their own indicators, that often excluded or gave insufficient weight to environmental data. The focus of the Environment Department's work was, the brief advised, on contributing to international work, particularly through the UN Commission on Sustainable Development (CSD) and OECD, and, domestically on the development of 'a credible system of national State of the Environment Reporting'. No mention was made of the work of ABS.

In essence, the brief was defensive, advising that there was no overarching or integrated approach and recommended that existing approaches involving incremental improvement and limited coordination continue. The brief does not state why it was written, but it would be reasonable to infer that Hill was keen to pursue sustainability reporting because he was not satisfied with current arrangements, annotating the brief that: 'There is a real need to try and bring these various strands together. CSD and OECD have now agreed to work together. We should be able to do the same thing at a national level.'<sup>601</sup> Hezri and Dovers draw a similar conclusion, arguing that the subsequently produced national headline sustainability indicators, discussed below, were developed 'because the former Environment Minister Hill doubted that Australia could debate sustainable development without a measurement system.'<sup>602</sup>

Shortly after this and at Hill's instigation, the Treasurer directed the PC to conduct an inquiry into the implementation of ESD by Commonwealth departments.<sup>603</sup> Information problems were central to its findings (see Box 4.2).

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<sup>600</sup> Department of the Environment, Assistant Secretary, International and Coordination 'Indicators of Sustainable Development', brief 6394, 18 May 1998 (Department of the Environment file 98/08422).

<sup>601</sup> Ibid.

<sup>602</sup> Adnan A Hezri and Stephen R Dovers, 'Australia's Indicator-Based Sustainability Assessments and Public Policy' above n 460, 307.

<sup>603</sup> Department of the Environment, 'Productivity Commission Inquiry into Implementation of Ecologically Sustainable Development', draft Incoming Government Brief 1998, No 50 (Department of the Environment file 98/10251). Note that Hill was also responsible for inserting s 516A into the EPBC Act, though this was at the instigation of the Australian Democrats, as part of an agreement to secure passage of the bill. Section 516A requires Commonwealth agencies to report on how the activities of the agency, including the administration of legislation and programs, accord with or contribute to, ESD.

## Overview

...

A key finding of the inquiry is that ESD implementation was constrained by inadequate information. There are two important aspects of this. First, for the most part there is no regular long-term monitoring and review of the performance of policies and programs with respect to the achievement of ESD objectives ...

...

Second, comprehensive datasets facilitating monitoring of the environment and sustainable development are lacking ...

However, there are some positive developments. For instance, the ABS is currently developing a system of environmental accounts for some natural resources and is considering indicators of sustainability ...

### **Box 4.2 Extracts from Productivity Commission Report, *Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies*<sup>604</sup>**

The PC made recommendations accordingly with the objective of establishing 'a consistent data series on key environmental attributes', including data collection, rationalisation and coordination.<sup>605</sup> It recommended strengthening the coordination role of the ABS, including by developing data protocols, but made no mention of that agency's work in measuring progress through MAP; it also promoted the NLWRA as a model for monitoring and measuring performance.<sup>606</sup> The PC noted the work of the ABS in developing environmental accounts, but recommended that preparation of an SoE report become a statutory obligation (by then already implemented).<sup>607</sup>

The report sought by Hill, *Are We Sustaining Australia? Report Against Headline Sustainability Indicators*, was published by the environment department in 2002 and reported 24 indicators against 21 values, each representing one of three core objectives of the NSESD.<sup>608</sup> On the specific issue of environmental information, the report concluded that:

None of these [objectives] can be achieved unless the ecological processes on which life depends are protected, and unless the natural resources on which economic and community well-being depend

<sup>604</sup> Productivity Commission, *Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies*, above n 587, Overview, XXXIX, XXXI.

<sup>605</sup> Ibid, recommendations 7.3–7.5

<sup>606</sup> Ibid.

<sup>607</sup> Ibid, recommendation 7.3.

<sup>608</sup> Environment Australia, *Are we Sustaining Australia? Report Against Headline Sustainability Indicators*, above n 460.

are managed sustainably. We do not have sufficient trend information yet in relation to the ecological and natural resource management indicators, to determine whether or not this is the case.<sup>609</sup>

The environment department began work on a second indicators report,<sup>610</sup> but it was not produced. Indeed, no further attempts were made to report on the NSESD, although theoretically the strategy was ongoing.

Almost simultaneously the ABS had begun publishing the series *Measures of Australia's Progress* in 2002. This report also sought to assess progress towards sustainability but was not directed specifically to the NSESD.<sup>611</sup> The ABS publication addressed more broadly the question, 'Is life in Australia getting better?' and expressly did not attempt to address sustainability.<sup>612</sup> Nevertheless it selected environment as one of three domains and, adopting a broad approach to wealth, sought to measure certain stocks of 'natural capital' within the environment domain,<sup>613</sup> an approach consistent with a goal of ESD. Despite the differences between the Environment Australia and ABS reports, the contemporaneous publication of two such closely related reports indicates a significant failure of coordination within government.

#### *Environmental Accounts and the Australian Bureau of Statistics*

The Howard government continued the environmental accounting work commenced under the previous government under the term 'green accounting', but simultaneously talked it up and down. Budget-related papers talked of the dissemination of environmental information as 'the fundamental basis for more effective formulation and management of environmental policies and programmes' and a speech by Minister Hill described environmental accounting as 'another most significant area of Commonwealth activity' and explained that accounts would 'show how economic activity in particular areas has an environmental impact and how economic decisions must take into account the environment.'<sup>614</sup> On the other hand, the Government reported little progress other than

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<sup>609</sup> Ibid, 6.

<sup>610</sup> Department of the Environment and Heritage, *Annual Report 2003–04* (DEH 2004) 200.

<sup>611</sup> See Australian Bureau of Statistics, 'Measuring Australia's Progress', Catalogue No 1370.0, (ABS, 2002); the most recent publication in this series at the time of writing was Australian Bureau of Statistics, 'Measures of Australia's Progress', Catalogue No 1370.0 (ABS, 2013). Later publications in the series substituted 'Measures' for 'Measuring'.

<sup>612</sup> Ibid, 4.

<sup>613</sup> Ibid, 2–3, 6.

<sup>614</sup> Robert Hill, 'Tracking Progress: Linking Environment and Economy Through Indicators and Accounting Systems', Speech to 1996 Fenner Conference on the Environment, 30 September 1996, available at <<http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;page=0;query=Hill%20green%20accounti>

ABS sectoral accounting publications from time to time,<sup>615</sup> while indicating separately that development of the accounts would take 'many years'.<sup>616</sup> In the meantime the ABS continued to participate in the international development of the SEEA, a new version of which was issued in 2003 (SEEA 2003).<sup>617</sup> A significant feature of SEEA 2003 was provision for physical and hybrid flow accounts, enabling economic activity to be presented in both material and value terms.<sup>618</sup>

### *Introduction of Outlook Reporting*

Outlook reporting is the projection of data forward, to predict the future state of the environment in light of trends such as population growth, or the impact of environmental policies. It was first developed in an environmental context by UNEP, which initiated its series Global Environment Outlook (GEO) reports in response to the environmental reporting requirements of UN Agenda 21.<sup>619</sup> The first GEO report was published in 1997 and the most recent, GEO-5, in 2012. The OECD followed shortly after, publishing its first report, in 2001, also with a 20-year outlook.<sup>620</sup> The outlook period is now 40 years.<sup>621</sup>

[ng%20Decade%3A%221990s%22%20SearchCategory\\_Phrase%3A%22media%22%20OtherSource\\_Phrase%3A%22minister%20for%20the%20environment%22;rec=2;resCount=Default>](#) (viewed 18 December 2016).

<sup>615</sup> See Robert Hill, *Investing in Our Natural and Cultural Heritage: The Commonwealth's Environment Expenditure 1999–2000*, Statement by Senator the Honourable Robert Hill, Minister for the Environment, 11 May 1999 (Australian Government, 1999) 63–64, see also Robert Hill, *Investing in Our Natural Heritage: The Commonwealth's Environment Expenditure 1997–1998*, Statement by Senator the Honourable Robert Hill, Minister for the Environment, 13 May 1997 (Australian Government, 1997), 28; Robert Hill, *Investing in Our Natural and Cultural Heritage: The Commonwealth's Environment Expenditure 1998–1999*, Statement by Senator the Honourable Robert Hill, Minister for the Environment, 12 May 1998 (Australian Government, 1998), 16; Robert Hill, *Investing in Our Natural and Cultural Heritage: The Commonwealth's Environmental Expenditure 2000–2001*, Statement by Senator the Honourable Robert Hill, Minister for the Environment and Heritage, 9 May 2000 (Australian Government 2000) 45.

<sup>616</sup> Commonwealth, *Parliamentary Debates*, House of Representatives, 9 September 1996, 3813 (Warwick Smith, 'Green Accounting', Answer to Question 394).

<sup>617</sup> United Nations et al, 'Studies in Methods, Handbook of National Accounting, Integrated Environmental and Economic Accounting 2003' UN, EC, IMF, OECD, World Bank 2003).

<sup>618</sup> See Robert Smith, 'Development of the SEEA 2003 and Its Implementation', above n 573, 596.

<sup>619</sup> A subsequent UNEP Governing Council decision of May 1995 requested the production of a 'new, comprehensive global state of the environment report' dealing with both the state of the global environment in 2015 (ie looking forward 20 years) and 'the expected impact of population increase, consumption and production patterns and economic development on the environment': United Nations Environment Program, Governing Council, 'New state-of-the-environment report', Decision 18/27 C, 18<sup>th</sup> meeting, 26 May 1995, [3], reported in 'Report of the Governing Council on the work of its 18<sup>th</sup> session, 15–26 May 1995', UN Doc A/50/25, UN GAOR, 50<sup>th</sup> sess, Supp No 25.

<sup>620</sup> Organisation for Economic Cooperation and Development, *OECD Environmental Outlook* (OECD 2001).

<sup>621</sup> Organisation for Economic Cooperation and Development, *OECD Environmental Outlook to 2050: The Consequences of Inaction* (OECD 2012).

Outlook reporting has since been introduced in Australia, but only in respect of the Great Barrier Reef.<sup>622</sup> Following a review, the *Great Barrier Reef Marine Park Act 1975* (Cth) was amended to require the publication of an outlook report every five years.<sup>623</sup> The first report was published in 2009.<sup>624</sup> There is no fixed outlook period. The model embedded in the Act is can be described as ecosystem health-risks-resilience-protection and management-future influences-long-term outlook, which is essentially state-pressures-responses (ie a variant of PSR), supplemented by an assessment of future pressures and responses.<sup>625</sup>

CSIRO has also prepared outlook reports; these however appear to have been unsolicited and there is no evidence to date of them having been used in formulating environmental policy.<sup>626</sup>

#### *State of the Environment Report 2006*

The third five-yearly state of the environment report was also published in 2006, close to the end of the Howard Government.<sup>627</sup> Despite the significant focus of the Government on environmental information (though mostly in its early years) this report was once again critical of the lack of environmental information, finding that ‘it is still impossible to give a clear national picture of the state of Australia’s environment because of the lack of accurate, nationally consistent, environmental data’.<sup>628</sup>

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<sup>622</sup> At first blush, the *Charter of Budget Honesty Act 1998* (Cth) appears to be the first Australian law requiring outlook reporting. The Act requires the Treasurer to publish an Intergenerational Report (IGR) at least once every five years, assessing the sustainability of current government policies for the following 40 years, including taking into account the financial implications of demographic change. The first IGR was published in 2003 and the most recent in 2015 (see the Hon J B Hockey MP, Treasurer, *2015 Intergenerational Report: Australia in 2055* (Commonwealth 2015)). However, the report is not considered further here because it is a report *by* government rather than *to* government, and is thus a political document. Note also that the report addresses ‘the sustainability of current Government policies’ rather than the sustainability of development: see s 3 and Schedule, clause 21 of the Act. In fact, several earlier reports including *Water 2000*, above n 501, were outlook reports in all but name.

<sup>623</sup> See s 54.

<sup>624</sup> Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2009* (GBRMPA 2009).

<sup>625</sup> See s 53(3).

<sup>626</sup> See Barney Foran et al, *Balancing act: a triple bottom line analysis of the Australian economy* (University of Sydney and CSIRO, 2005); Steve Hatfield-Dodds et al, *Australian National Outlook 2015: Economic activity, resource use, environmental performance and living standards, 1970–2050* (CSIRO 2015).

<sup>627</sup> Australia State of the Environment Committee, *Australia State of the Environment 2006: Independent report to the Australian Government Minister for the Environment and Heritage* (Australia State of the Environment Committee, 2006) (*‘SoE Report 2006’*).

<sup>628</sup> Ibid 3.

#### 4.4.4 Renewed Emphasis on Accounting and Sustainability Reporting from 2007 under Rudd and Gillard Governments

*Taking Stock: Second OECD Environmental Performance Review of Australia*

As with the previous change of long-term government in 1996, the change of long-term government in 2007 coincided with the second OECD environmental performance review of Australia. The review again found that the lack of accurate and nationally consistent environmental information made it impossible to give a clear picture of Australia's environment.<sup>629</sup> The OECD noted that overall, in the decade since its previous review, the provision of environmental information had expanded greatly, 'often together with that of relevant social and economic data.'<sup>630</sup> Nevertheless:

What seems lacking, however, is a consistent set of environmental data and a set of key environmental indicators common to different reports. This frustrates many efforts to aggregate data at the Australian government and State/Territory levels, and thus to monitor policies' effectiveness. In addition, because of *inconsistencies in data collection* from one report to the next, there is very little trend data available.

Concerning *economic data* on the environment (eg environmental expenditure, environmental employment, environment -related taxes, water prices), there is room for progress and for greater support of environmental policies. The latest estimates on environmental expenditure are ten years old, although some elements ... are more recent ... [A]s a result, it has become more difficult to analyse such factors as trends, application of the polluter-pays principle, leveraged effects and actual shifts in priorities. Further progress in these areas would be in line with the related OECD Council Recommendations.<sup>631</sup>

Although expressed in muted bureaucratic language, this is actually quite stiff criticism, in two respects. First, available data did not present a clear picture of the state of the environment, or of environmental trends, because environmental data are not even consistent, let alone comprehensive. Further, the lack of information meant that it was not possible to assess whether environmental policy had been integrated with economic policy, as the OECD had recommended (over many years and with the support of successive

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<sup>629</sup> Organisation for Economic Cooperation and Development, *OECD Performance Reviews: Australia* (OECD 2007)

<sup>630</sup> Ibid 231.

<sup>631</sup> Ibid (original emphasis).

Australian governments). There is also more than a hint in this language that the OECD suspected that if such information were available, it would reveal that the Australian government had failed to implement policy directions that it had supported.

In light of this less-than-desirable starting point, the main information initiatives during this period, the National Plan for Environmental Information (NPEI) and sustainability reporting appear to be very timely, but as will be seen below, once again implementation would fail to match aspiration.

#### *Enhancing State of the Environment Reporting and its Policy Uses*

As part of a response to issues identified in the 2006 SoE report, including the 5 year gap between these reports, the environment department decided to ‘develop an annual publication to help maintain the public capacity for evidence-based debate about nationally significant environmental issues’.<sup>632</sup> In 2008 Minister Garrett was briefed and was supportive; the department published its intentions in its annual report and subsequently developed a draft publication covering 11 topics in 2009.<sup>633</sup> Subsequently, the department decided to re-develop the proposed publication as a series of fact sheets,<sup>634</sup> before deciding in 2010 that the range of statistics covered by the project ‘was much broader in scope than the department’s direct responsibilities. As a result, the department decided the risks associated with department publishing [the reports] outweighed the benefits ...’ and transferred the material to the 2011 SoE Committee.<sup>635</sup> The problem was too big to solve within one portfolio and existing resources.

#### *National Plan for Environmental Information*

The 2020 Summit convened by Prime Minister Rudd in 2007 to help shape the nation’s long-term future recommended (among many other things) that Australia implement a set

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<sup>632</sup> Department of the Environment Water, Heritage and Arts, ‘Key Environmental Statistics: hand-over to the 2011 SoE Committee’ Departmental Briefing, 10 September 2010 (Department of the Environment Water, Heritage and Arts Department file 2010/02680).

<sup>633</sup> Department of the Environment Water, Heritage and Arts, *Annual Report 2008–09* (DEWHA 2009), 225; Department of the Environment Water, Heritage and Arts ‘Key Environmental Statistics’ (Draft agenda paper for Senior Executive Managers Meeting 17 May 2010) (marked ‘not used’), (Department of the Environment Water, Heritage and Arts file 2010/02680).

<sup>634</sup> Ibid.

<sup>635</sup> Department of the Environment Water, Heritage and Arts, ‘Key Environmental Statistics’, above n 633; Department of the Environment Water, Heritage and Arts ‘Key Environmental Statistics’ (Draft agenda paper for Senior Executive Managers Meeting 17 May 2010) above n 633.

of national environmental accounts and integrate these into a comprehensive national accounts system, so as to 'internalise the values from society and the environment'.<sup>636</sup>

The Government's response was to agree in principle, noting that it had already committed to a new National Water Account and revisions to the National Carbon Accounting System, and was 'looking into the establishment of a broader set of national environmental accounts' which in turn would involve considering existing accounting mechanisms such as carbon accounting.<sup>637</sup> The Department however proposed to the Minister a broader national environmental information agenda. This agenda covered the roles and responsibilities of various governments and agencies in an overall 'system'; improved collection of and access to data; and statistical reports and products, 'such as national environmental accounts and State of the Environment reports'.<sup>638</sup> The rationale for this broader approach was that, despite significant improvement in some areas, important data gaps remained; there continued to be a lack of coherence in collecting activity and:

In many areas we also lack the time series and sophisticated models to help us determine the effectiveness of past interventions or consider the likely effectiveness of possible interventions.<sup>639</sup>

The department advised that further cooperative work with states lacked impetus, ownership of cross-portfolio or cross-jurisdictional information, or agreement on information requirements and drivers, 'and a consequent lack of clear objectives for an improved environmental information capacity'.<sup>640</sup> In other words, there was no clear goal and no clear plan or commitment to remedy basic deficiencies in the system. Internal briefing notes for a subsequent discussion with the Minister advised senior officials that 'it

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<sup>636</sup> Australia 2020 Summit Steering Committee, *Australia 2020 Summit: Final Report* (PM&C 2008) 1; Australian Government, *Responding to the Australia 2020 Summit* (Australian Government, 2009) 75. Associated recommendations were to give environmental indicators the same status as economic indicators (including 'showing trends in the ecological footprint'); and to undertake the valuation of environmental and social measures at the same level as economic measures, 'ensuring differentiation between "dollarisation" and valuing'. Note that the State of the Environment Report 2006 and the 2007 OECD Performance Review had also recommended accounts; the Hawke Review would also do so in 2010.

<sup>637</sup> Ibid.

<sup>638</sup> Department of the Environment, Water, Heritage and the Arts, Assistant Secretary, Environmental Research and Information, 'National Environmental Information Agenda', Brief B08/2050, 8 August 2008 (Department of the Environment, Water, Heritage and the Arts file 2008/12653).

<sup>639</sup> Ibid.

<sup>640</sup> Ibid.



would be difficult to implement National Environmental Accounts without an improvement in basic environmental data.<sup>641</sup>

The department subsequently recommended to the Minister that he take to Cabinet a proposal for a National Plan for Environmental Information (NPEI), with four key elements: a set of national environmental information products, including environmental accounts and outlooks, along with national data standards and datasets; new institutional arrangements in the form of a statutory role for BoM as the custodian of a comprehensive environmental data system and coordinator with other government initiatives and agencies, and with states; an investment program to fund data products and reduce data gaps; and a phased implementation strategy to build capacity over time.<sup>642</sup> The policy logic was one of better understanding developments (through accounting, which looks back) and trends (through outlook reporting, which looks forward), supported by investment in data and made effective through institutional reform.

The Government subsequently announced the NPEI in the 2010 Budget. Cabinet papers relating to this proposal are not available until 2030, but the NPEI as announced was much more limited than the department's initial proposal, with key components of what is better described as an initiative rather than a plan, because there was no plan as such, and components of the initiative were qualified with words such as 'commence'.<sup>643</sup> Significant effort was directed to reforming governmental structures and processes, the centrepiece being a commitment to establish BoM by law as the authority for environmental information. Other substantive elements were to review data and 'begin building priority

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<sup>641</sup> Department of the Environment Water, Heritage and Arts, 'Meeting with Minister Peter Garrett to discuss AG initiatives and progress on the national environmental information agenda, Thursday 4 September 2008', undated 'discussion notes' (Department of the Environment, Water, Heritage and the Arts file 2008/12653).

<sup>642</sup> Department of the Environment, Water, Heritage and the Arts, Assistant Secretary, Environment Resources and Information Branch, 'Progress on a Set of National Environmental Accounts' Brief B09/1882, 15 July 2009 (Department of the Environment, Water, Heritage and the Arts file 2008/12653). Under s 6 of the *Meteorology Act 1955* (Cth),

(1) The functions of the Bureau [of Meteorology] are:

(a) the taking and recording of meteorological observations and other observations required for the purposes of meteorology; and  
(b) the forecasting of weather and of the state of the atmosphere.

Meteorology is not defined in the Act but according to the *Oxford English Dictionary* is 'the branch of science that deals with atmospheric phenomena and processes, esp. with a view to forecasting the weather.' There must be some doubt as to whether the Bureau of Meteorology has the power to perform functions in relation to environmental data other than for purposes connected with atmospheric phenomena and weather forecasting. The Bureau's water functions are conferred under the *Water Act 2007* (Cth), s 120.

<sup>643</sup> See Department of the Environment, Water, Heritage and the Arts, and Bureau of Meteorology, *The National Plan for Environmental Information*, Information Sheet, (DEWHA 2010).

national environmental datasets and the infrastructure to deliver them'.<sup>644</sup> This infrastructure would include national environmental information standards; stage one of an integrated Environmental Information System to collate, manage and provide public access to national environmental datasets; and a commitment to 'commencing development of a framework to deliver national environmental accounts'.<sup>645</sup> Significantly, although the government had undertaken discussions with states concerning the National Environment Information System (NEIS), including 'completing a stocktake and assessment of environmental information initiatives' across all jurisdictions, the Commonwealth ultimately went it alone, undertaking its own review of environmental information activity across the Australian government.<sup>646</sup>

### *Independent Review of Australian Government Environmental Information Activity*

One commitment under the NPEI was to review Australian Government environmental information activity. This review (the Morton Tinney Review) identified, and made recommendations in response to, a range of cultural, structural, funding, technical and legal obstacles to effective and efficient use of the environmental information base across the Australian Government.<sup>647</sup> From a policy perspective, the most significant finding and recommendation was that structural barriers to collaboration and coordination made the role of a central coordinating authority 'crucial' and that the Government should 'consider the merits of, in the longer term, transferring the central coordinating authority function to a separate statutory body' as had been established for health statistics under the *Australian Institute of Health and Welfare Act 1987* (Cth).<sup>648</sup> The government did not respond to the review, with the department later advising a parliamentary committee that the report had simply 'helped shape' its approach.<sup>649</sup>

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<sup>644</sup> Ibid.

<sup>645</sup> Ibid.

<sup>646</sup> See Department of the Environment, Water, Heritage and the Arts, *Annual Report 2008–09*, above n 633, 224–225; and Department of the Environment, Water, Heritage and the Arts, *Annual Report 2009–10* (DEWHA 2010) 279. The annual reports make no further mention of this initiative.

<sup>647</sup> Steve Morton and Anthea Tinney, *Independent Review of Australian Government Environmental Information Activity: Final Report* (DSEWPaC 2012) viii.

<sup>648</sup> Ibid, 22, section 3.2.2, dot point 6.

<sup>649</sup> Senate Standing Committee on Environment and Communications Legislation Committee, Parliament of Australia, 'Answers to questions on notice: Environment' portfolio, Budget Estimates 2015–16 (May 2015), Question No 67, <[http://www.aph.gov.au/Parliamentary\\_Business/Senate\\_Estimates/ccctte/estimates/bud1516/environment/index](http://www.aph.gov.au/Parliamentary_Business/Senate_Estimates/ccctte/estimates/bud1516/environment/index)> (viewed 29 June 2016).

*Accounting and its Domestic Application*

With apparent independence from this course of policy development, the ABS continued to develop environmental accounting at a slow but steady pace, publishing sectoral accounts, including on water and waste,<sup>650</sup> while also moving into experimental land accounts, starting with an account for Victoria in 2012.<sup>651</sup> No doubt anticipating the adoption of the SEEA as an international standard, in 2010 ABS published a paper on linking the environment and economy through environmental-economic accounting.<sup>652</sup> The story was one of a litany of problems with environmental information (see Box 4.3). The ABS' solution to this problem was to map out a forward program of work in producing a greater range of sectoral environmental-economic accounts on a regular basis, arguing that 'the ultimate result of this work will be a more informed user community, and a stronger basis for socio-economic and environmental policy formulation in Australia.'<sup>653</sup> But note that at this point, with the adoption of the SEEA approaching, the ABS were still canvassing both the organisation of information around environmental media or domains rather than systemic units such as ecosystems, along with the analysis of issues according to the DPISR model (see Box 4.3).

## 1.2 The Environmental Information System

...

Because Australia faces numerous environmental issues across a range of domains, there are many individuals and organisations collecting environmental information, often with a particular scientific, regulatory or administrative purpose in mind. This results in a highly fragmented set of data which suffers from a range of problems including:

- inconsistent definitions and standards
- independence from any framework which facilitates data linkage or interconnectivity
- inconsistent frequency and timing
- poor spatial representation
- low levels of visibility, discoverability and accessibility
- lack of time series and therefore lack of stability over time
- poor capacity to support modelling and forecasting

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<sup>650</sup> Australian Bureau of Statistics, 'Water Account 2004–05', ABS catalogue no 4610.0 (ABS 2006); Australian Bureau of Statistics, 'Waste Account, Australia, 2010–11', Catalogue No 4602.0.55.006 (ABS 2014). See also Australian Bureau of Statistics, 'Waste Account, Australia, Experimental Estimates, 2013' (ABS 2013, Catalogue No 4602.0.55.005. Under the *Census and Statistics Act 1905* (Cth) s 9(a), the Australian Statistician can collect 'statistical information in relation to ... matters prescribed ...' Clause 5(u) of the *Statistics Regulations 1983* (Cth) prescribes the matter 'conservation and environment'; reg 5 also prescribes a number of other matters relevant to the environment.

<sup>651</sup> Australian Bureau of Statistics, 'Land Account: Victoria, Experimental Estimates', ABS catalogue no 4609.0.5 5.002 (ABS, 2012).

<sup>652</sup> Australian Bureau of Statistics, 'Linking the environment and economy: Towards an integrated environmental-economic account for Australia', Catalogue 4655.0.55.001 (ABS 2010).

<sup>653</sup> Ibid 9.

A comprehensive national environmental information system should be built on two pillars — first, the essential bio-physical information pertaining to the state of the environment, and second, the complementary socio-economic information on drivers, pressures, impacts and responses. The pillars should be integrated to ensure that the bio-physical and socio-economic dimensions of environmental issues can be considered concurrently in policy formulation and other decision-making ...

This implies that there should be a common logic for organising both the bio-physical and socio-economic information. Such logic could be built around the various environmental domains (eg water, air, land) organised in a driver-pressure-state-impact-response framework ...

**Box 4.3 Extracts from Australian Bureau of Statistics Report, *Linking the environment and economy: Towards an integrated environmental-economic account for Australia*<sup>654</sup>**

In a significant yet under-recognised report, *Completing the Picture*, the ABS made the first attempt to analyse environmental policy issues by reference to data from environmental accounts.<sup>655</sup> However, the analysis of sustainability was made mostly by reference to weak sustainability; data were provided for water, greenhouse gas emissions, waste and land-cover, but, consistent with WS, the stocks were denominated in monetary terms, except for land-cover data, which was available in hectares only.<sup>656</sup> A chapter on the Great Barrier Reef included a biodiversity account, but due to data limitations could only denominate the account in terms of the statutory conservation status of species (ie by a simple indicator of whether species were listed as threatened and if so, in what category).<sup>657</sup> Another chapter examined green growth but the analysis was again incomplete. It concentrated on efficiency but, reflecting the ambivalence of green growth towards the constraints inherent in sustainability, discussed natural capital in terms of changes to particular natural resources including timber, fish and coal without taking the analysis to the point of evaluating the significance of trends and thus implications for sustainability.<sup>658</sup> Despite the limitations of this report, it represents a significant advance in the application of environmental information and the lack of apparent policy attention to it is surprising.

### *Adoption of the System of Environmental-Economic Accounts*

<sup>654</sup> Ibid, 4, 7.

<sup>655</sup> Australian Bureau of Statistics, *Completing the Picture: Environmental Accounting in Practice*, ABS Catalogue 4628.0.5 5.001 (ABS 2012).

<sup>656</sup> Ibid chapter 4.

<sup>657</sup> Chapter 5.

<sup>658</sup> Ibid chapter 7.

The SEEA was finally adopted as an international accounting standard in 2012,<sup>659</sup> although the endorsed 'Central Framework' did not include ecosystem accounting, which was published separately as an 'experimental' framework.<sup>660</sup> Work continues on the experimental framework, with the objective of its finalisation in 2020.<sup>661</sup>

Even though it had taken two decades to develop a standard, which is yet to include ecosystem accounting, the potential of the SEEA to support sustainability goals should not be understated.<sup>662</sup> The extension of the 'asset boundary' of the economy to include natural assets such as ecosystems, even though they often have no owner or exchange value and the extension of the 'production function' (which delimits what constitutes economic activity) to include ecosystem services, even though they are 'produced' by the environment rather than human actors, supports the 'capital and income' conceptualisation that underlies ESD. This was recognised early by Rapport and Friend, who argued in the early 1990s that as the concept of SD emerged, there was a need to:

reorient national information systems in order to track sustainable development paths. Current statistical frameworks are designed to measure 'economic growth' based on concepts of 'social progress' which, by and large, ignore the state of the stocks of natural resources and the 'externalities' of production. What is being suggested here is a system of national statistics where the *stock* and *flow* of natural resources are integral part of the general framework of social and economic statistics.<sup>663</sup>

Further, the measurement of environmental assets and ecosystem services in physical terms, where they do not have an exchange (market) value, while also allowing for the use of exchange values where they exist, circumvents the difficulties that arise in mainstream economics, particularly in CBA, of attempting to attribute prices to non-market goods and services. Again, this had been recognised at an early point by El Serafy:

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<sup>659</sup> UN, *SEEA Central Framework*, above n 97.

<sup>660</sup> United Nations et al (eds), *System of Environmental-Economic Accounting 2012: Experimental Ecosystem Accounting* (United Nations, 2014).

<sup>661</sup> See <<https://seea.un.org/content/seea-experimental-ecosystem-accounting-revision>> (viewed 5 April 2018).

<sup>662</sup> Dietz and Neumayer point out that the SEEA can be used in support of either WS or SS, although obviously the combined presentation of physical and monetary units lends itself to the SS model: Simon Dietz, and Eric Neumayer, 'Weak and Strong Sustainability in the SEEA: Concepts and Measurement' (2007) 61(4) *Ecological Economics* 617.

<sup>663</sup> Anthony M Friend and David J Rapport, 'Evolution of macro-Information Systems for sustainable development'. (1991) 3 *Ecological Economics* 59, 60, 73 (original emphasis).

Although it would be easier to collect environmental data in the form of flexible reports on the state of the environment and country profiles, the need for ... environmental accounts is paramount, so that the information is standardised, exhaustive, summed up in physical and monetary terms, and comparable in time and space. The long-term goal is to match the standards already reached by national (economic) accounting, which make the SNA such a powerful planning tool for short-term economic management.<sup>664</sup>

*Measuring progress: double sustainability reporting, then none*

In its paper on linking the environment and economy through accounting, the ABS had summarised the advantages of environmental accounting as including the provision of a quantitative basis for policy analysis and design according to a consistent and complete conceptual framework that follows an international standard.<sup>665</sup> The Government however was driven by a strong and unanticipated public reaction to government-initiated discourse concerning the 'big Australia' that would result from current population trends, to announce a Sustainable Population Strategy that emphasised the need for measures of sustainability rather than the design of frameworks for sustainability-focused decision-making.<sup>666</sup> A report by a Sustainable Development Panel under the strategy recommended that sustainability indicators should be used as a basis of policy formation generally, but, circuitously, saw indicators as 'a useful approach to clarifying what is meant by sustainability', because indicators 'illustrate whether we are, or are at risk of, becoming unsustainable'.<sup>667</sup> In the subsequent 2011–2012 Budget the Government provided funding to develop sustainability indicators and report against them, also announcing that 'sustainability impact statements' would be developed to assist consideration of new policy proposals. The measure included a data collection fund 'to support the ongoing collection of priority data and a [public] directory of sustainability measurement'.<sup>668</sup>

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<sup>664</sup> Salah El Serafy and Ernst Lutz, 'Environmental and Resource Accounting: An Overview', in Yusuf J Ahmad, Salah El Serafy and Ernst Lutz (eds), *Environmental Accounting for Sustainable Development: A UNEP-World Bank Symposium* (The World Bank 1988) 5.

<sup>665</sup> ABS, *Linking the environment and economy* above n 652, 6.

<sup>666</sup> Tony Burke, Minister for Sustainability, Environment, Population and Communities, *Portfolio Budget Statements 2011–12, Budget Related Paper No 1.17, Sustainability, Environment, Water, Population and Communities Portfolio* (Australian Government 2011).

<sup>667</sup> 'Sustainable Development Panel Report', Appendix 3 to Department of Sustainability, Environment, Water, Population and Communities, *A Sustainable Population for Australia: Issues Paper* (Australian Government 2011), 4.

<sup>668</sup> Wayne Swan and Penny Wong, *Budget measures 2011–12: 2011–12 Budget Paper No. 2 circulated by The Honourable Wayne Swan, M.P., Deputy Prime Minister and Treasurer of The Commonwealth of Australia, and Senator the Honourable Penny Wong, Minister for Finance and Deregulation of the Commonwealth of Australia*. (Australian Government, 2012), 79 ('Sustainable Australia — measuring sustainability'). Note that in the same budget the program 'deliverables' were amended to include the development of an 'online directory of sustainability information': Tony Burke, Minister for Sustainability, Environment, Water, Population and Communities,

The indicators developed under this initiative were used by the government-appointed National Sustainability Council in the subsequent *Sustainable Australia Report 2013* and the report positioned as providing ‘a benchmark against which we can measure our progress over time’.<sup>669</sup> The report adopted a stocks and flow model, including ‘natural capital’ terminology, but once again this was described as a starting point, with the report drawing familiar conclusions:

[W]e have relatively limited information on Australia’s natural capital. ... The result is that we are often unable to access reliable, relevant and nationally consistent information on some of our most important national assets, such as land use, water quality and biodiversity.<sup>670</sup>

Despite the advent of the *Sustainable Australia Report*, ABS continued to produce *Measures of Australia’s Progress*. The 2010 edition had included six dimensions in the environment domain, concluding that the condition of biodiversity and the atmosphere had regressed, while there were insufficient data to measure overall progress against headline indicators for land, inland waters, oceans and estuaries, and waste. This edition was criticised for not adopting normative concepts of progress;<sup>671</sup> the 2013 edition addressed this criticism, adopting a set of ‘aspirations’, in effect unofficial social goals and objectives, identified through a consultative process.<sup>672</sup> Unfortunately this replaces one problem with another. It is hard to see how a statistical agency can, with any authority, draw conclusions about national goals and aspirations such as the following, by asking people rather than by seeking direction from government, even assuming that the statement arose from a well-designed and executed process and even if the ambiguities of the term ‘sustain’ are put to one side. This is because the critical issue in policy terms is not what society aspires to in principle, but what society is committed to do in full knowledge of the trade-offs involved, for example those involved in meeting the following goal, which aligns with conceptions of strong sustainability:

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*Portfolio Budget Statements 2013–14, Budget Related Paper Number 1.17: Sustainability, Environment, Water, Population and Communities Portfolio* (Australian Government 2013) 51.

<sup>669</sup> National Sustainability Council, *Sustainable Australia Report 2013* (Australian Government 2013) 16.

<sup>670</sup> Ibid.

<sup>671</sup> Kathryn Davidson and Lou Wilson 2011, ‘Australia’s Progress Undefined: A Critical Review of Measures of Australia’s Progress (MAP)’, (2011) 70 *Australian Journal of Public Administration* 47.

<sup>672</sup> Australian Bureau of Statistics, *Measures of Australia’s Progress, Aspirations for Our Nation: a Conversation with Australians About Progress* (ABS 2013); Australian Bureau of Statistics, ‘ABS announces planned changes to future work program’, *Media Release*, (ABS, 5 June 2014).

<<http://www.abs.gov.au/AUSSTATS/abs@.nsf/mediareleasesbyReleaseDate/745695D9AEBEFE64CA257CEE0004715C?OpenDocument>>(viewed 8 July 2016).

Sustaining economic performance over the long term was seen as important. During the consultation, people said they wanted an economy that meets the needs of Australians today without compromising the needs of future generations. They felt this may mean sustaining the resources, services and infrastructure that underpin social functioning, and protecting, managing and using these sustainably.<sup>673</sup>

Nevertheless, assuming there to be such a commitment, whether discerned from consultation or by policy decision, the report concluded that managing the environment sustainably in Australia had regressed over the last decade; this was because 'Australia's net greenhouse gas emissions (our headline progress indicator for managing the environment sustainably) has increased.'<sup>674</sup>

While the *Sustainable Australia Report* was prepared 'in close consultation with key data agencies, including the [ABS]', and referred directly to *Measuring Australia's Progress*, the two reports clearly overlapped very significantly.<sup>675</sup> However, with a change of government in 2013 both reports were discontinued, with funding redirected in the case of the *Sustainable Australia Report* to 'priority information gaps related to environment indicators'.<sup>676</sup>

Duplicated sustainability reporting had been replaced by none.

#### **4.4.5 Return to Instrumentalism from 2013 Under Abbott and Turnbull Governments**

Once again, a change of government produced a change in the general direction of environmental information, with a significant reduction in emphasis on accounts and sustainability reporting leaving a greater relative prominence on instrumental approaches directed to enhancing the quality and availability of information. This was a consequence of substantial budget cuts rather than one of articulated policy.

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<sup>673</sup> ABS 2013 above n 672, 93. See also the following statement at 95: Acting to sustain the natural environment and its resources for the long term was a strong recurring theme in the consultation and was considered important to business, government, communities and society. People felt that how we use the environment's resources affects our wellbeing and the wellbeing of future generations. In relation to this, people talked about the importance of environmental resources that provide the basis for food and industrial production. They also discussed the development of adaptive technologies and strategies to enable environmental sustainability.

<sup>674</sup> Ibid 24.

<sup>675</sup> *Sustainable Australia Report*, above n 669 7, 25.

<sup>676</sup> Australian Bureau of Statistics, 'ABS announces planned changes to future work program', *Media Release*, above n 672; Department of Sustainability, Environment, Water, Population and Communities, *Annual Report 2013–2014* (DSEWPac 2014) 42. The identified information gaps included national terrestrial condition monitoring and an Australian Bird Index.



*Continued Development of National Environmental Information Infrastructure*

Despite government not proceeding with announced legislation to enshrine the BoM's broader environmental information role, the Bureau had nevertheless developed its role of central coordinating authority for environmental information on a facilitative basis. It developed the National Environmental Information Infrastructure (NEII) and has released various guidelines and standards.<sup>677</sup> According to the 'roadmap' for the NEII, an objective is to 'develop a standards-based federated environmental information platform for Australia'.<sup>678</sup> The vision of the roadmap is for discovery of and access to information, and integration 'by users' of information across domains 'for their specific uses'.<sup>679</sup> In other words, the strategy is to enhance the availability of information, rather than organisational frameworks for, or uses of, information. Even as regards availability, the roadmap mentions the States only once, to acknowledge them as 'major producers and custodians of environmental data';<sup>680</sup> there is no mention of their participation or of any strategy to secure this. This is less a whole-of-government problem that it once was, as 'open data' initiatives proliferate and make data more available. For example, it is now possible for anyone to view multiple layers of environmental data by location on a dedicated website.<sup>681</sup> However, the unilateral nature of the initiative remains problematic while primary on-ground responsibilities remain with the States.

*Continued Development of Accounts: Two Steps Forward One Step Backwards*

The adoption of the SESA in 2012 allowed the ABS to begin publishing general integrated environmental-economic accounts in 2014 and to publish its first experimental ecosystem account, covering the GBR.<sup>682</sup> On the other hand, funding for the NPEI lapsed. As a

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<sup>677</sup> Measures undertaken by the Bureau include an online Environmental Information Products and Services Directory (see <<http://www.bom.gov.au/environment/activities/products/>>); a Statement of Australian Government Requirements for Environmental Information (see Australian Government Environmental Information Advisory Group, *Statement of Australian Government Requirements for Environmental Information* (BoM 2012)); and a Guide to Environmental Accounting (see Bureau of Meteorology, *Guide to environmental accounting in Australia* (BoM 2013)). The Bureau has also released National Principles for Environmental Information (see Australian Government Environmental Information Advisory Group, *National Principles for Environmental Information* (BoM 2015)). Standards are based on the National Environmental Information Infrastructure (NEII) Reference Architecture.

<sup>678</sup> Bureau of Meteorology, *National Environmental Information Infrastructure Roadmap 2014–2019*, Version 2.0, Environmental Information Programme Publication Series, document no. 6 (BoM 2015) 6.

<sup>679</sup> Ibid 2.

<sup>680</sup> Ibid 3.

<sup>681</sup> The website is <<https://data.gov.au>>.

<sup>682</sup> Australian Bureau of Statistics, *Australian Environmental-Economic Accounts 2013*, ABS catalogue no 4655.0, (ABS, 2014) and then annually: the latest is Australian Bureau of Statistics, *Australian Environmental-Economic*

result, while BoM had developed an initial capacity to produce environmental accounts, ‘to help integrate environmental information into decision-making’, it ‘ceased developing this capability in June 2014.’<sup>683</sup> A legacy of BoM’s work on accounting was the publication of guidelines containing the ironic recommendation that environmental accounting should be adopted across government.<sup>684</sup>

### *Outlook Reporting*

The Great Barrier Reef Marine Park Authority published its second Outlook Report in 2014.<sup>685</sup> The Commonwealth Scientific and Industrial Research Organisation (CSIRO) also published an outlook report, *Australian National Outlook 2015*, projecting forward to 2050, but in contrast with the reef report, not only was this report non-statutory, it was apparently unsolicited by government, leaving an open question as to whether it will influence policy.<sup>686</sup> Certainly the optimistic resource efficiency narrative of the report might have political appeal:

Australia has the capacity to pursue economic growth, sustainable resource use and reduced environmental pressures simultaneously. Policies and institutions will be essential to realise Australia’s full potential and manage the associated trade-offs and risks.<sup>687</sup>

## **4.4.6 A Return to Accounting**

In 2018 Australia’s environment ministers released a strategy for a ‘common national approach’ to environmental accounting, based on the SEEA.<sup>688</sup> The articulated vision however is better-informed decision-making in support of benefit optimisation, ie a

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*Accounts 2016* (ABS 2016, Catalogue No 4655.0); ABS, *Land Account: Great Barrier Reef Region, experimental estimates, 2014*, ABS catalogue no 460 9.0.5 5.001, (ABS 2014). Reference to the SEEA includes both the SEEA *Central Framework* and the *Experimental Ecosystem Accounts*, both adopted in 2012.

<sup>683</sup> Bureau of Meteorology, ‘Environmental Accounts’, <[www.bom.gov.au/environment/activities/accounts.shtml](http://www.bom.gov.au/environment/activities/accounts.shtml)> (viewed 30 June 2016).

<sup>684</sup> Bureau of Meteorology, *Guide to Environmental Accounting* (Bureau of Meteorology 2013) preface.

<sup>685</sup> Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2014* (GBRMPA 2014).

<sup>686</sup> Hatfield-Dodds et al, *Australian National Outlook 2015*, above n 626.

<sup>687</sup> Ibid ii.

<sup>688</sup> Department of the Environment and Energy, ‘Environmental Economic Accounting: A Common National Approach Strategy and Action Plan’ (Department of Environment and Energy 2018), available at <<http://www.environment.gov.au/system/files/resources/f36c2525-fb63-4148-8f3c-82411ab11034/files/environmental-economic-accounting-strategy.pdf>> (viewed 30 May 2018).

neoclassical economic approach, rather than policy integration in support of sustainability goals.<sup>689</sup>

## 4.5 Evaluation of Australian National Approaches and Conclusions

Despite early recognition of the centrality of environmental information; significant development of informing frameworks and standards; Australia's continuous and active engagement with those advances; numerous information initiatives over 45 years; major advances in technology and significant criticism in various reviews including from the OECD;<sup>690</sup> Australia lacks a comprehensive environmental *information* system, let alone *informing* systems. How and why has this come to be?

### 4.5.1 Significant Advances of Principle; A Litany of Policy Failure

The history of national approaches to informing systems reveals a litany of policy failure. This litany includes a failure to set clear policy objectives and to pursue them in a sustained manner; a related failure to follow through and 'close the loop' by feeding environmental information back into policy-making; and two concomitant failures: a tendency to develop one-off or 'orphan' measures in response to particular policy needs or pressures and a failure to coordinate and integrate, both horizontally (within the Commonwealth) and vertically (with States).

#### *Failure to Set and Persist with Clear Policy Goals and its Obverse: Policy Ad Hocery and Amnesia*

Even at the level of a basic instrumentalism, the challenge is as limpid as the policy narrative has been muddy. Governments recognised the centrality of environmental information early in the modern environmental era, as did scholars:

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<sup>689</sup> Ibid, 'Vision' (unpaginated), 1. In the meantime, the ABS has continued to produce environmental accounts, including two experimental ecosystem accounts for the Great Barrier Reef in 2015 and 2017: Australian Bureau of Statistics, 'Information Paper: An Experimental Ecosystem Account for the Great Barrier Reef Region', Catalogue 4680.0.55.001 (ABS 2015); Australian Bureau of Statistics, 'Experimental Environmental-Economic Accounts for the Great Barrier Reef', Catalogue 4680.0 (ABS 2017).

<sup>690</sup> In 2016, the five-year review of Australia's Biodiversity Conservation Strategy 2010–2030 became the latest in a long line of reports to conclude that there were significant gaps in environmental information, particularly in respect of biodiversity: see Biodiversity Working Group convened under the Meeting of Environment Ministers, 'Report on the Review of the first five years of Australia's Biodiversity Conservation Strategy 2010–2030' (Department of the Environment 2016). For the same conclusion, see also the Sustainable Australia Report 2013, above n 669 2, 16.

If an effective management of the natural and environmental and resource base is to be achieved, policymakers need to have access to a consistent, reliable and comparable data set, relating to the availability and use of such resources.<sup>691</sup>

In contrast to this goal of consistent, reliable, comparable and relevant data, stop-start and disconnected initiatives have been common. Significant still-born or orphan initiatives include the National Air Quality Data Centre (1970s); a national environmental database (1980s); the State of the Marine Environment Report (1990s) and the NLWRA (2000s). In recent times government has returned to issues of national air quality data-gathering. Such a lack of coherence is not surprising given the lack of clear, ongoing, policy objectives for informing systems and periodic shifts in focus up or down the information pyramid, for example the shifts down to general instrumentalism in the early to mid-1980s and early to mid-2010s.

Ad hocery and amnesia has also been manifest at higher levels on the pyramid. Environmental accounting offered a comprehensive and innovative approach to organising environmental information but governments have run hot and cold. The importance of accounting approaches was recognised in Australia as far back as 1975. Australia was an early adopter of the 'natural capital' discourse at the OECD in the 1980s and followed through to the point of commencing, but then discontinuing, a national-level dialogue on natural resource accounting in the late 1980s. At one point in the 1990s government appeared to be both supportive and discouraging of environmental accounting at the same time. Commitments from this era could be argued to have been given effect through the ongoing work of the ABS, but if this is correct, governments did only half the job, leaving the ABS to develop accounts without working on the integration of accounts into decision-making. A subsequent commitment in 2010 under the NPEI to develop accounts seemingly ignored the work of the ABS; it was dropped but by 2016 governments were shaping up once again to pursue accounts.

### *Implementation Failures*

Even where information initiatives are integral to strategic reforms, governments have failed to implement, and especially to institutionalise, environmental information measures.

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<sup>691</sup> Pearce et al, *Blueprint for a Green Economy*, above n 148, 93.

The NSESD is the most prominent example here. The institutionalisation of SoE reporting has also been weak. Although the report requirement was eventually included in legislation, a regulatory power to set reporting requirements for SoE has not been used,<sup>692</sup> with the result that each SoE reporting committee has determined its own approach and as a result there is only a general continuity between five-yearly reports. And state-of-the-environment reporting was not integrated with the NLWRA, despite major overlaps in objectives and coverage. The portfolio ‘silo effect’ appears to have been at work here. Over a decade later under the NPEI, a commitment to legislate for the environmental information role of BoM was not implemented and a recommendation of the Morton Tinney report did not even attract a government response.

#### *Failure of Coordination and Integration, Duplication*

As early as 1981 a Parliamentary committee, considering environmental data and reporting, noted that although it had received ‘considerable evidence’ on the lack of environmental data, it had heard from the ABS that the federal Environment Department was the only agency, federal or state, to have requested its assistance.<sup>693</sup> Even the Environment Department did not maintain a consistent engagement with the ABS on environmental information, failing for example to appoint it to the State of the Environment Advisory Council established in 1992.<sup>694</sup> When Minister Hill was briefed on sustainability indicators no mention was made of the ABS and even the 1999 PC report on ESD described the work of the ABS incompletely.

This ‘siloed’ approach to horizontal integration has persisted. Not only is the policy-information loop not closed, but parts of it are duplicated. In the 2000s, *Measuring Australia’s Progress* overlapped significantly with *Are We Sustaining Australia?*, while in the 2010s this pattern was repeated by *Measures of Australia’s Progress* and *Sustainable Australia Report 2013*. In the meantime the ABS and BoM produce overlapping water accounts.<sup>695</sup>

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<sup>692</sup> EPBC Act, s 516B(2).

<sup>693</sup> House of Representatives Standing Committee on Environment and Conservation Commonwealth, *Environmental Protection: Second Report on the Adequacy of Legislative and Administrative Arrangements (National Parks and Wildlife Conservation Act; Great Barrier Reef Marine Park Act; Environmental Statistics)* above n 502, [214].

<sup>694</sup> Professor Stephen Dovers, committee member, pers comm; see also Department of the Environment Sport and Territories, *State of the Environment Reporting: Framework for Australia* (DEST 1994), Appendix A: State of the Environment Advisory Council.

<sup>695</sup> See Michael Vardon, Ricardo Martinez-Lagunes, Hong Gan and Michael Nagy, ‘The System of Environmental-Economic Accounting for Water: development, implementation and use’ in Jayne M Godfrey and Keryn Chalmers (eds), *Water Accounting: International Approaches to Policy and Decision-making* (Edward Elgar 2012) 42. A subsequent review argued implicitly that there was complementarity, on the basis that the BoM account was biophysical and the ABS account economic: see Interagency Working Group on Commonwealth

The story is similar with respect to vertical integration. Despite the content of the NSESD and IGAE, poor implementation has left the loop unclosed and States have their own environmental information programs, no doubt duplicating at least some Commonwealth data. The Commonwealth has also displayed a unilateralism, in that BoM has developed 'national' standards for environmental information which neither involve nor apply to the States, even though they are major if not the dominant holders of environmental information.

In addressing policy integration through the production of environmental-economic accounts, the ABS has responded to government but government has then failed to take up the product. The ABS has had little option other than to move at the pace of international currents.

#### *Failure to Link Environmental Information to Sustainability Goals*

Despite a slow start, by 1992 informing systems had been placed at the centre of sustainability approaches through the domestic commitment to an accounting approach in the NSESD and the international commitment to environmental accounting in Agenda 21. There was no corresponding commitment however to develop the *uses* of accounts: there was no 'policy pull' to match the 'accounting push'.<sup>696</sup> Similarly, there is no requirement on government to respond to the findings of SoE reports and no indication that environmental information is the subject of broad analysis of environmental trends analogous to the way in which Treasury analyses macroeconomic factors such as inflation or unemployment. In the same vein, while the GBR Outlook Report appears to have influenced the joint Australian and Queensland Governments' Reef 2050 Long-Term Sustainability Plan significantly,<sup>697</sup> there is no evidence of policy consideration having been given to using outlook reports more generally. Indeed, the CSIRO has produced several

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Water Information Provision, 'Providing Water Information to the Commonwealth, the Report of the Interagency Working Group' (Australian Government, 2016) 18. While that may be true, it does not explain why accounting roles were split or how the two sets of accounts might be used to present an integrated picture of the management of Australia's water resources.

<sup>696</sup> This argument has been developed in Michael Vardon, Peter Burnett and Stephen Dovers, 'The Accounting Push and the Policy Pull: Balancing Environment and Economic Decisions' (2016) 124 *Ecological Economics* 145.

<sup>697</sup> See Australian Government and Queensland Government, 'Reef 2050 Long-Term Sustainability Plan', (Australian Government and Queensland Government, 2015). The plan refers to the Great Barrier Reef *Outlook Report* 41 times.

outlook-style reports, most recently *Australian National Outlook 2015*, apparently without eliciting a response from Government.<sup>698</sup>

Dovers argues that, even when the data are available and an information framework has been adopted, the scale, complexity, and uncertainty of sustainability problems is such that informing systems need to learn and adapt over time. He also argues that the broad characteristics of adaptive institutions and policy processes are *persistence*, ie the maintaining of initiatives (including the information itself) long enough for lessons to be learnt and learning supplied; *purposefulness*, so that firm direction is possible because policy is underpinned by goals and principles; *information-richness and -sensitivity*, on the basis that they are essential to learning and improvement; *inclusiveness* to meet demands for community participation; and *flexibility*, to prevent persistence and purpose from becoming rigidity.<sup>699</sup> Another characteristic of adaptive institutions identified by Dovers, their capacity to be 'integrative', might be promoted to this list: if institutions and processes are not integrated, as for example when the ABS produces accounts that the rest of government appears not to use, it is unlikely that the informing system will survive budgetary pressures among other things.<sup>700</sup> At no time have national initiatives come close to possessing these qualities and indeed the truth is closer to the opposite: at most times, most of these attributes have been lacking. The Commonwealth Auditor-General is just the latest in a long line of critics:

In particular the absence of early consideration of measurement approaches means that entities are not well placed to establish relevant baselines and collect fit-for-purpose data to inform monitoring activity over the course of implementation.<sup>701</sup>

#### 4.5.2 Why Have Environmental Information Policies Failed?

What explanation can there be for this litany of policy failures? A major factor has been changes of information policy by successive governments. Because reforms have not been institutionalised nor bipartisan support built for information policy objectives, successive

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<sup>698</sup> See also Commonwealth Scientific and Industrial Research Organisation, *Australia's Environment and Natural Resources: an Outlook* (CSIRO, 1990); Commonwealth Scientific and Industrial Research Organisation, *Future Options to 2050: Australian Stocks and Flows Framework* (CSIRO, 2000). The Foreword to the latter report states that 'ASFF is the core analytical tool being used by the CSIRO Resource Futures Program ...'

<sup>699</sup> Stephen Dovers, 'Informing institutions and policies' in John Higgins and Jackie Venning, *Towards Sustainability: Emerging Systems for Informing Sustainable Development* (UNSW Press, 2001) 204.

<sup>700</sup> Ibid 211 (Table 9.4).

<sup>701</sup> Grant Hehir (Auditor-General), *Environmental Audit: a Commonwealth Perspective*, text of speech to Commonwealth Auditors-General Conference, New Delhi, 22 March 2017, <<https://www.anao.gov.au/work/speech/environmental-audit-commonwealth-perspective>> (viewed on 11 August 2017).

governments change policy as if little has gone before them. And because informing systems is a 'behind-the-scenes' subject matter, the constituencies that might otherwise object to such changes lack traction or are simply absent. Another major underlying factor is the division of responsibilities between levels of government. Under a goal of ESD it is clearly the Commonwealth's responsibility to drive sustainability outcomes at a national level. Yet it is the States that are, on the whole, responsible for on-ground programs. Policy failure thus often manifests itself at a local level and responsibility is not sheeted home to the Commonwealth. As a by-product of the division of power under a federal system, the Commonwealth's political incentives are, to a significant degree, perverse. Good information is likely to point with new clarity to the need for difficult decisions; to the extent that the States are unable or unwilling to take such decisions, this raises the prospect of forcing (politically expensive) or buying (financially expensive) state compliance. Without good environmental information, the Commonwealth can usually afford to ignore the problems and policy failures, which are often apparent only over the short term. In these circumstances it also retains the politically easy options of taking a 'holier than thou' position towards the States or adopting what might be called 'stocking-filler' policies, through which it makes small contributions or complements state efforts without incurring significant cost or political risk. This is why Commonwealth policies so often use words like 'contribute' and 'assist'. Australia's constitutional system does allow for governments to compensate for the division of power, including through ministerial councils and intergovernmental agreements as considered in this thesis, but in relation to environmental information at least, these have not been successful, principally because of poor implementation effort.

General characteristics of Australia's system of government also offer some explanation: corners were cut in developing both the 1989 Statement (chapter three) and the NSESD (chapter five) due to political pressures, while budget pressures appear to have strangled the NPEI at birth. Further, while the written record is only partial, the writer's examination of departmental files did not reveal any strong advice to government about the criticality of informing systems to ESD or environmental policy generally. If given, as it may have been, such advice may have been unwelcome. Investment in environmental information is often mundane and politically unattractive (although the 2020 Summit is a counter-example). Moreover, despite a lack of evidence, it would not be surprising if governments avoided full implementation of comprehensive information strategies out of a concern that clear information might point unequivocally to the need for politically unpalatable decisions.



All of these factors offer partial explanation but even together they are not satisfying. The underlying problem is that informing systems are done best when driven by need. The failure of governments to implement ESD in conformity with the vision laid out in strategic documents such as the 1989 Statement and the NSESD, together with the later hollowing-out of government commitments to ESD, described elsewhere in this thesis, removed the need for a comprehensive and robust informing system and thus left environment information policy and informing systems open to the vicissitudes of the other factors above. If governments were serious about ESD, they would be serious about informing systems, but as they are not, the consequences for government of policy failure in this area are minor.

The argument made at the beginning of the chapter was that environmental information policies should in principle be the easiest to develop: the benefits of comprehensive informing systems are clear and superficially the task seems straightforward, involving non-controversial measures at a relatively low cost. But this assumes a commitment to the policy goal. In the absence of such commitment, the combination of politics, perverse incentives and the practical problems of government conspire to create a challenging, even toxic, environment for informing systems. Momentum might have been built over time by consistency of approach, institutionalisation, and the application of environmental information in support of both improved decision-making and an ongoing political narrative for ESD. As this has not occurred, continuing environmental decline suggests that momentum might only be generated reactively, perhaps by a crisis or perhaps a natural disaster.

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## CHAPTER FIVE

### THE NATIONAL STRATEGY ON ECOLOGICALLY SUSTAINABLE DEVELOPMENT

*And though they seeme wives for you never so fit,  
Yet let not harmfull haste so far out run your wit:  
But that ye harke to heare all the whole summe  
That may please or displease you in time to cumme.  
Thus by these lessons ye may learne good cheape  
In wedding and all things to looke ere ye leaped.*

John Heywood, *A Dialogue Conteynyng the Nomber in Effect of All the Prouerbes in the Englishe Tongue*  
(1546)

This chapter is a case study of the National Strategy on Ecologically Sustainable Development (NSESD), initiated by the Hawke Government in 1989 and finalised by the Council of Australian Governments (COAG), consisting of the Prime Minister and State Premiers, in 1992.<sup>702</sup> The story of the Strategy falls into four distinct stages, the first of which was internal government deliberation on how to implement ESD. In the second stage, often referred to as ‘the ESD Process’ (a term continued here), the Government convened nine ESD Working Groups, consisting of Commonwealth and State officials, industry, unions and environment group representatives and chaired by three independent experts. The working groups produced the ESD Working Group Reports, a set of 12 reports, nine dealing with sectoral issues, one each dealing with intersectoral and greenhouse issues, and a volume of executive summaries. The reports contained over 500 recommendations.<sup>703</sup> In the third stage, the Commonwealth, and States, now full partners, negotiated the NSESD itself, adopting the measure at the first meeting of the Council of

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<sup>702</sup> COAG *National Strategy for Ecologically Sustainable Development*, above n 354.

<sup>703</sup> The nine working group reports covered Agriculture, Energy Use, Energy Production, Fisheries, Forest Use, Manufacturing, Mining, Tourism and Transport. Some members were appointed for their expertise, others to represent stakeholders or governments. See Ecologically Sustainable Development Working Groups, *Ecologically Sustainable Development Working Groups: final report*, vol 1 *Agriculture* (AGPS 1991) (‘ESD Agriculture Report’); vol 2 *Energy Production* (AGPS 1991); vol 3 *Energy Use* (AGPS 1991); vol 4 *Executive Summaries* (‘ESD Executive Summaries’) (AGPS 1991); vol 5 *Fisheries* (AGPS 1991); vol 6 *Forest Use* (AGPS 1991); vol 7 *Greenhouse* (AGPS 1992); vol 8; *Intersectoral Issues* (‘ESD Intersectoral Issues Report’) (AGPS 1992); vol 9 *Manufacturing* (AGPS 1991); vol 10 *Mining* (AGPS 1991); vol 11; *Tourism* (AGPS 1991); vol 12 *Transport* (AGPS 1991).

Australian Governments in December 1992. The NSESD was accompanied by a *Compendium of Ecologically Sustainable Development Recommendations* (the *Compendium*) containing government responses to the working group recommendations.<sup>704</sup> The final stage concerns the implementation of the NSESD. The strategy was reviewed twice, in 1994 and again in 1996. Although it had no stated end-point and remains technically on foot to this day, the strategy was not implemented actively after 1996. The NSESD was the centrepiece of ESD initiatives.

## 5.1 Preliminary Matters: Federal Institutions and Institutionalisation

### Generally

The NSESD was originally envisaged as a Commonwealth policy document, but in its final form was agreed by COAG as a 'national' strategy. Both the ESD Process and NSESD relied significantly on portfolio-based ministerial councils in development and implementation. A brief discussion of the place of both ministerial councils and intergovernmental agreements in Australian federal cooperation will assist in understanding developments. A brief discussion of institutional theory and corporatism is also apposite, as the chapter will argue that two phenomena, a general reluctance to institutionalise ESD and the Hawke Government's corporatism, were significant factors in the ultimate failure of the NSESD.

#### *Ministerial Councils and Intergovernmental Agreements*

Ministerial councils and intergovernmental agreements of varying levels of formality have long been a feature of Australia's federal landscape. The first ministerial councils, Premiers' Conferences, in which the Prime Minister and State Premiers met to discuss federal financial arrangements, were called shortly after federation in 1901.<sup>705</sup> Portfolio-based ministerial councils were first established in the 1930s, while the first environment ministerial council, the Australian Environment Council, was established in 1971.<sup>706</sup> Council roles are variable but intergovernmental consultation is their core common

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<sup>704</sup> Council of Australian Governments, *Compendium of Ecologically Sustainable Development Recommendations*, An accompanying document to the National Strategy for Ecologically Sustainable Development and the National Greenhouse Response Strategy (AGPS 1992).

<sup>705</sup> Martin Painter, *Collaborative Federalism: Economic Reform in Australia in the 1990s* (Cambridge University Press, 1998) 103–104.

<sup>706</sup> Department of Environment, *Annual Report for Period July 1974 to June 1975*, above n 482, 26.

theme.<sup>707</sup> Premiers' Conferences were replaced as the pre-eminent ministerial council in 1992 by COAG, with a mandate to facilitate increased intergovernmental cooperation, especially economic reform.<sup>708</sup> Despite being the pre-eminent body in a system of Commonwealth-State relations with a long and complex history, COAG itself lacks institutionalisation, having no basis in legislation or intergovernmental agreement.<sup>709</sup> As a result, COAG's purpose and operation has varied over time, at the whim of the Prime Minister.<sup>710</sup> Generally the position has been similar for portfolio-based ministerial councils, although over the years an increasing number of councils were formalised in some way and in recent times COAG has re-established some councils as subordinate bodies to COAG.<sup>711</sup>

Formal intergovernmental agreements date back to the River Murray Waters Agreement in 1914 and became common over time,<sup>712</sup> while less formal intergovernmental agreements — national policies, plans, strategies and harmonised approaches of various kinds — abound. Even when endorsed by COAG, such agreements do not have any standardised or minimum content.<sup>713</sup> In fact, even when intergovernmental agreements are drafted with full legal formality, they are not directly legally binding,<sup>714</sup> although they may be given legal force through subsequent legislative implementation.<sup>715</sup>

All of this reflects a policy style in Australia of weak institutionalisation of federal cooperation.<sup>716</sup> When governments do take significant institutionalising action, it is usually to implement specific initiatives. The National Environment Protection Council,

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<sup>707</sup> Andrew Hede, 'Reforming the Policy Role of Inter-governmental Ministerial Councils' in Andrew Hede and Scott Prasser, *Policy Making in Volatile Times* (Hale & Ironmonger 1993) 194.

<sup>708</sup> See Painter, Collaborative Federalism, above n 705, 44.

<sup>709</sup> John Phillimore and Alan Fenna, 'Intergovernmental Councils and Centralization in Australian Federalism' (2017) 27(5) *Regional & Federal Studies* 597, 603.

<sup>710</sup> *Ibid.*

<sup>711</sup> Painter, above n 705, 105–106; see Council of Australian Governments, 'Role of COAG Councils', <<https://www.coag.gov.au/coag-councils>> (viewed 10 April 2018). Other ministerial councils, including the council dealing with environment, have been abolished formally but, because some level of federal cooperation and coordination is essential, continue to meet as simple 'meetings of ministers'.

<sup>712</sup> *Ibid* 100–103.

<sup>713</sup> Nadeem Samnakay, 'Thinking Strategically in Federal Policy: Defining the Attributes of High-level Policies' (2017) 76(1) *Australian Journal of Public Administration*, 106.

<sup>714</sup> *South Australia v Commonwealth* (1961–1962) 108 CLR 130.

<sup>715</sup> The National Environment Protection Council is an example. *The National Environment Protection Council Act 1994* (Cth) and corresponding State and Territory Acts implement aspects of the IGAE, which is reproduced in a schedule to the Act, although this does not give it any legal force.

<sup>716</sup> Even the Interstate Commission, a body directly established by the Australian Constitution to deal with inter-jurisdictional issues of trade and commerce, has operated for only 23 out of 117 years of Australian federation. The *Constitution of the Commonwealth of Australia*, s 101, provides that 'There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.' The Interstate Commission was established under the *Inter-State Commission Act 1912* (Cth) (repealed) but lapsed in 1920; it was re-established under the *Interstate Commission Act 1975* (Cth) (repealed), then abolished in 1990.

established under the *National Environment Protection Council Act 1994* (Cth) and corresponding State laws to make national standards on enumerated pollution and waste issues, is a rare example in the environment field but even this body has withered on the vine, now operating in a minimalist mode.<sup>717</sup>

Another characteristic of federal cooperation in Australia is ‘executive federalism’, under which federal relations are driven, ironically, from the centre by executive governments.<sup>718</sup> This dominance of federal relations by the executive (indeed the central agencies) of each jurisdiction, combined with very limited constitutional provision or theory on cooperative federal arrangements, means that cooperative federal arrangements have developed with limited scrutiny, debate or institutional development and thus with limited theory as to how such bodies fit or should operate in the federal system. Executive federalism had implications for the NSESD that are discussed later in the chapter.

### *Theory of Institutions and Policy Implementation*

The study of institutions has always been foundational to the social sciences, but it was the ‘new institutionalism’ pioneered by March and Olsen in political science in the 1980s, and by North, Williamson and Coase in economics, that brought fresh attention to institutions, summed up in the basic empirical observation that ‘the organisation of political life makes a difference’.<sup>719</sup> Of particular relevance here is the recognition, common to new institutionalism across disciplines, that many of the constraints on individuals and groups take the form of institutions.<sup>720</sup> Taking institutions in the broad sense of socially constructed norms and socially prescribed behaviours rather than in the narrow ‘bricks and mortar’ sense,<sup>721</sup> a corollary of these basic observations is that any policy requiring

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<sup>717</sup> The NEPC Service Corporation, on paper an independent organisation, has been absorbed in the Commonwealth Environment Department and the NEPC website does not display any active projects and no annual report for 2016–2017, the most recent reporting year: see National Environment Protection Council, *2015–16 Annual Report* (NEPC 2016); NEPC website, <<http://www.nepc.gov.au>> (visited 9 April 2018).

<sup>718</sup> Donald V Smiley, *The Federal Condition in Canada* (McGraw-Hill Ryerson, 1987) chapter 4; Campbell Sharman, ‘Executive Federalism’, in Brian Galligan, Owen Hughes and Cliff Walsh (eds), *Intergovernmental Relations and Public Policy* (Allen and Unwin 1991) 24–25.

<sup>719</sup> James G March and Johan P Olsen, ‘The New Institutionalism: Organizational Factors in Political Life’ (1984) 78(3) *The American Political Science Review* 734, 747. On new institutional economics, see Oliver E Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting* (Free Press 1985); Ronald Coase, ‘The Institutional Structure of Production’, 82(4) *American Economic Review* 713.

<sup>720</sup> See Robert E Goodin, ‘Institutions and Their Design’ in Robert E Goodin (ed), *The Theory of Institutional Design* (Cambridge University Press, 1996) 1, 19–20. As Goodin explains, this view is common to new institutionalism in political science, economics and sociology.

<sup>721</sup> Ibid 1, 19, citing Shmuel N Eisenstadt, ‘Social institutions: the concept’ in David L Stills (ed), *International Encyclopaedia of the Social Sciences* (Macmillan 1968) vol 14, 409–21.

constraints on behaviour will require significant institutionalisation. The NSESD is so strikingly minimalist in its approach to institutionalisation and implementation as to suggest that governments were not seeking even to change, let alone constrain, behaviour in any significant way, as ESD would require.

### *Hawke Government's Corporatist Style*

Corporatism is a system of interest-representation in which constituent units are organised into a limited number of categories, the agents of which are granted a representational monopoly by the state in return for operating within certain controls on selection of leaders and articulation of demands.<sup>722</sup> The Hawke Government was widely known for its corporatist and consensus-seeking policy style.<sup>723</sup> This government's extension of corporatism to federal relations, casting state officials as representatives of ministerial councils and the councils in turn as representing their member governments, was, this chapter will argue, a failed policy experiment and a significant factor in the failure of the NSESD as policy. Even though the NSESD was finalised under Prime Minister Keating, who had a very different policy style, the Strategy retained significant elements of the corporatist approach.

## **5.2 Cabinet Deliberation on Implementing ESD**

The Government's efforts in the late 1980s to place environmental policy on a rational footing through the development of policy principles, culminating in the commitment to ESD, were discussed in chapter three. In making the 1989 Statement Hawke had promised a public progress report and subsequently put an internal reporting mechanism in place. It was surprising then that within a few months, Primary Industries Minister Kerin and Resources Minister Cook wrote to the PM advising him of their own initiative to 'fully implement the concept of sustainable development' for natural resource industries.<sup>724</sup> They

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<sup>722</sup> See Philippe C Schmitter, 'Still the Century of Corporatism?' (1974) 36(1) *Review of Politics* 85.

<sup>723</sup> On Hawke's consensus-seeking approach, see Stephen Mills, *The Hawke Years: The Story from the Inside* (Viking, 1993) 25–27. See also Toyne and Balderstone, 'The Environment', above n 294, 181, where Toyne points to Keating's dislike of Hawke's 'New Federalism'. On Hawke Government's use of corporatist approaches to environmental policy more generally, see D McEachern, 'Environmental Policy in Australia 1981–91: A Form of Corporatism?', (1993) 52(2) *Australian Journal of Public Administration*, 173.

<sup>724</sup> Kerin and Cook, Letter to Prime Minister Hawke, 7 November 1989, above n 328. Under the Hawke Government's ministerial arrangements, these two ministers represented a single portfolio of Primary Industries and Energy. Kerin was the senior of the two ministers and thus also a member of Cabinet.

argued that the 1989 Statement had not fully defined ESD; that the notion of sustainable development was in danger of becoming 'meaningless cant'; and proposed a national response to the Brundtland Report, followed by the statement that:

whether or not you agree that a national response is desirable, Peter Cook and I intend to develop an integrated strategy, in any case, within this portfolio ...<sup>725</sup>

Hawke's reaction to his ministers' bold tone, on its face something of a policy ambush, is unknown, but he agreed that they bring the proposal before Cabinet.<sup>726</sup> The process that Cabinet later adopted would take more than three years and involve major effort by two levels of government and many industry and environment groups, with very limited policy return.

### 5.2.1 Environment Department Reaction to Kerin–Cook Proposal

Hawke's decision to bring the matter to Cabinet brought the internal policy tensions to a head. Having received a copy of Kerin's and Cook's letter, Environment department officials prepared internal briefings, draft ministerial correspondence and later, a draft Cabinet briefing, all of which suggest that various senior environment officials regarded the move to develop a strategy as premature, for several policy reasons.<sup>727</sup> First, the Government was already pursuing or implementing a number of sustainability initiatives, including its 1988 decision to adopt the three RAC Principles and Hawke's then-recent 1989 Statement. Second:

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<sup>725</sup> Ibid.

<sup>726</sup> Australian Government, 'National Strategy for Sustainable Development' *Cabinet Memorandum 6899*, above n 330, 5.

<sup>727</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, First Assistant Secretary, Conservation Division, 'Sustainable Development', Minute to Acting Secretary, 10 November 1989 (Department of the Arts, Sport, the Environment, Tourism and Territories file 90/8543); Department of the Arts, Sport, the Environment, Tourism and Territories, Draft Letter from Minister Richardson to Prime Minister Hawke, undated, (Department of the Arts, Sport, the Environment, Tourism and Territories file 90/8543); Department of the Arts, Sport, the Environment, Tourism and Territories, draft 'Briefing on Sustainable Development', Facsimile Transmission to Office of the Minister for the Arts, Sport, the Environment, Tourism and Territories, 4 December 1989 (Department of the Arts, Sport, the Environment, Tourism and Territories file 90/8543). The available records do not indicate whether the drafts were finalised although the draft Cabinet briefing was sufficiently advanced to send to the minister's office for comment.



The letter from the two ministers fails to acknowledge adequately the serious lack of theoretical underpinning of the notion of sustainable development, or of the ramifications of what we do here for global environment concerns.<sup>728</sup>

Third, while government had yet to work out what sustainability meant, it certainly meant ‘structural change on a big scale across all portfolios’,<sup>729</sup> whereas the Kerin/Cook proposal:

might do little more than allow the industry sectors to obtain a “warm inner glow” from initiating a sustainable development ethic and then proceeding to plunder ahead.<sup>730</sup>

The gist of this advice was that government had yet to come to grips with decisions already taken, especially the need to reform government decision-making. Unusually, the Environment Minister broke Cabinet protocol and instructed his officials not to submit a departmental ‘coordination comment’ on the draft Cabinet memorandum, on the stated ground that he considered that ‘more time is needed to think about the proposals’.<sup>731</sup> Richardson’s reasons for this unusual intervention are not clear but he evidently had significant concerns.

### 5.2.2 Cabinet Memorandum and Decision

The matter came to Cabinet in the form of a Cabinet memorandum brought forward by Kerin’s and Cook’s department. The memorandum argued that in the context of public debate over the need for both economic development and conservation, resource industries had lost ‘the confidence necessary to continue to expand their productive base’ and were:

now loudly asking that the Government give a clearer direction to both environmental and development strategies in Australia. They want better planning and decision-making.<sup>732</sup>

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<sup>728</sup> Department of the Arts, Sport, Environment, Tourism and Territories, First Assistant Secretary, Conservation Division, above n 727. Beyond policy, functional relevance was also a concern. The author of this minute goes on to advise the Acting Secretary that, despite this, there was considerable pressure from both environment groups and industry to pursue a ‘wider based exercise’ and that ‘I doubt we have any option but to do so if we wish to remain prominent in the field’.

<sup>729</sup> Department of the Arts, Sport, the Environment, Tourism and Territories, draft ‘Briefing on Sustainable Development’, above n 727, 6.

<sup>730</sup> Ibid. The unusual colour in these words is due to their being drafted as Cabinet speaking notes for the Environment Minister.

<sup>731</sup> Department of the Prime Minister and Cabinet, Assistant Secretary Primary Industry and Environment, ‘Cabinet Memorandum No 6899: National Strategy for Sustainable Development’, Briefing Note to Prime Minister, 30 November 1989 (NAA A11116, CA3594).

<sup>732</sup> Australian Government, ‘National Strategy for Sustainable Development’ *Cabinet Memorandum 6899*, above n 330, 2. Note that there was one department serving two ministers.

At the same time, there was not:

the necessary awareness within the resource based sector that its productive base depends importantly on its environmental and ecological capital. Importantly, there is a clear need to increase awareness in this sector that this capital must be protected and enhanced such that economic development can be sustained in the long term.<sup>733</sup>

Not only had ESD not been defined, 'nor do we have a conceptual policy framework on which to deal with development and conservation issues'.<sup>734</sup> A national strategy was needed:

The ultimate objective is to rigorously define ecologically sustainable development and its implications for specific industries, prioritise the targets and issues involved and set out a timetable for action over the 1990s that has the full commitment of the groups involved.<sup>735</sup>

Cabinet agreed to develop a national strategy, later styled as the NSESD, through a process involving the preparation of a discussion paper that would articulate the concept of SD, followed by the establishment of 'working groups' that would consider 'the practical application of that concept'.<sup>736</sup> It decided to cast the net widely in seeking to define ESD, agreeing that 'the concept of [ESD] be defined and applied as far as possible to all industries and environmental issues'; it also asked officials to identify 'related current or intended exercises on the definition of [ESD] and its achievement in practical terms'.<sup>737</sup>

Significantly, the memorandum had argued that:

This strategy will need to accommodate specific industries, existing programs within Commonwealth, State and international spheres, and the real limits of what the Commonwealth can achieve. It will be consultative and participatory in approach, and will include the various industry, Government and community groups investigating issues, and developing proposals and programs for action which will then be drawn together into a single, consistent strategy ...<sup>738</sup>

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<sup>733</sup> Ibid.

<sup>734</sup> Ibid.

<sup>735</sup> Ibid 3.

<sup>736</sup> Australian Government, *Cabinet Minute 13463*, above n 330, [2(c)], [2(e)(iii)].

<sup>737</sup> Ibid [2(a)], [2(e)(i)].

<sup>738</sup> Australian Government, 'National Strategy for Sustainable Development' *Cabinet Memorandum 6899*; decision in *Cabinet Minute 13463*, above n 330.

Initially, Cabinet left open the principles around which the working groups would be organised, although it implied acceptance of this industry-oriented framing by asking officials to identify both ‘the main sectoral and cross-sectoral issues to be addressed’ as well as ‘generic environmental issues such as species diversity, coastal management and the greenhouse effect’.<sup>739</sup> Later, Cabinet endorsed a recommendation that the working groups be sector-based and chaired by ‘eminent persons’.<sup>740</sup> It did not provide specifically in its decision for the treatment of ‘intersectoral issues’ such as biodiversity and climate change, thereby giving tacit endorsement to the advice of officials, whose advice went no further than to advise that it was essential that working groups be directed to take these issues into account.<sup>741</sup>

### 5.3 The ‘ESD Process’

The ESD process began with the release of an ESD Discussion Paper in June 1990. After considering public comments on the discussion paper, the Prime Minister appointed three independent chairs (‘the Chairs’), two professors and a director of research from CSIRO, to chair nine sectoral working groups. The Prime Minister wrote a ‘charter letter’ to the Chairs that served as terms of reference. Each working group had members from industry, unions, community and conservation groups, the Australian and New Zealand Environment and Conservation Council and Commonwealth and State officials. The three Chairs undertook a separate process of preparing reports on intersectoral issues. The ESD Process also involved public consultation, although in the overall context of time being ‘extremely limited’.<sup>742</sup> The ESD Process concluded with the submission of reports in two tranches, the nine sectoral reports in November 1991 followed by the intersectoral and greenhouse reports in February 1992.<sup>743</sup>

#### 5.3.1 The ESD Discussion Paper

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<sup>739</sup> *Cabinet Minute 13463*, above n 330.

<sup>740</sup> Australian Government, *Cabinet Minute 13862*, 25 June 1990, [2 (b), (e)], endorsing *Cabinet Memorandum 7136*, above n 337.

<sup>741</sup> *Cabinet Memorandum 7136*, above n 337, 4. Section 6 of the Discussion Paper attached to the cabinet memorandum and subsequently released by the Government did discuss these issues.

<sup>742</sup> *ESD Executive Summaries*, above n 703, iii–iv (Letter of Transmittal).

<sup>743</sup> The process is outlined in the Preface to the *ESD Executive Summaries* (above n 703) and the Forward to the *ESD Intersectoral Issues Report*, above n 703).

The ESD Discussion Paper articulated a ‘fundamental’ policy goal of ‘improvement of the community’s standard of living’; this was defined broadly to include, in addition to income, environment, social justice and personal freedoms, and was ‘thus more akin to the notion of quality of life’.<sup>744</sup> The approach of the paper to defining ESD and its principles was discussed in 3.3.3, but in brief the policy narrative was ambivalent. On the one hand, ESD was defined consistently with SS and the paper acknowledged that there were limits to substituting non-natural for natural assets without fundamentally changing biological processes and creating ‘environmental debt’ that would burden future generations.<sup>745</sup> Caution required avoiding the risk of irreversible damage to environmental assets wherever possible.<sup>746</sup> On the other hand, there are numerous references, more consistent with WS, that biophysical limits were not immutable. These included the possibility of short-term reductions in stocks ‘but a recovery to previous levels over time’; the possibility of developing substitutes for lost natural assets; the possibility that ‘it may be worthwhile paying the price of some environmental damage to ensure present and future economic benefits’ and the fact that ‘[t]here is no agreement on the exact meaning of the concept of protecting biodiversity’.<sup>747</sup> One reference, to the need to consider the degree and pace of impacts on *present* generations, of decisions to provide for *future* generations, suggests ambivalence about committing to the ESD goal itself.<sup>748</sup>

While appropriate that a discussion paper should not pre-empt the issues it canvassed, text suggestive of ambivalence about the goal risked creating doubt about government resolve and certainly invited resistance from interests adversely affected. Government records do not reveal the reasons for the ambivalence, but Hamilton’s argument, essentially that the government either could not or would not depart from existing policy paradigms, is certainly consistent with the facts.<sup>749</sup> Caught between its new commitment to ESD and its conventional commitment to economic growth, it thus ‘fudged’ the fundamental issue of conflict over resource use and implied that ‘all that is needed is some tinkering at the edges when development goes too far’.<sup>750</sup>

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<sup>744</sup> Australian Government, *ESD Discussion Paper*, above n 380, 1.

<sup>745</sup> Ibid 6, 8.

<sup>746</sup> Ibid 9.

<sup>747</sup> Ibid 5, 6, 7, 9, 22.

<sup>748</sup> Ibid 7.

<sup>749</sup> Hamilton, ‘Ecologically Sustainable Development: Implications for Governance in Australia’, above n 433, 67.

<sup>750</sup> Ibid. Diesendorf and Hamilton make the related point that government failed to deal adequately with the issue of economic growth during the working group process, adding an explicit reference after the event, in the NSED: Mark Diesendorf and Clive Hamilton (eds), *Human Ecology, Human Economy: Ideas for an Ecologically Sustainable Future* (Allen & Unwin, 1997), 290–291.

### 5.3.2 Prime Minister's 'Charter Letter'

After receiving public comments on the discussion paper, the Government convened the ESD working groups, chaired by three independent experts ('the Chairs').<sup>751</sup> The Prime Minister wrote a 'charter letter', effectively terms of reference, to the Chairs, identifying their task as being to provide both advice on future policy directions and proposals for implementing those directions. Like the discussion paper, these letters sent mixed messages about the Government's objectives and level of policy ambition. On the one hand, the Prime Minister asked that the deliberations of the working groups be guided by four 'fundamental goals' that later became ESD principles (see extracts in Box 5.1).<sup>752</sup> These goals were consistent with the SS paradigm, as were other supporting principles referred to in the letter. On the other hand, he requested that the working groups pursue consensus within the context of budget constraints and existing policies and programs. Weak policy integration (Tier 2) is the only approach that might have fitted this bill. In effect, the Prime Minister asked the working groups to pursue the paradigm shift of ESD by incremental means: surely an impossible task!

Dear Dr Green,

I am writing to confirm your appointment as Chair of the Ecologically Sustainable Development working groups ...

...

The focus of your task is to provide advice to Government on future policy directions, and to develop practical proposals for implementing them, in the context of the Government's general budgetary constraints and existing policies and programs which impinge on the subject areas.

As you will be aware, the ESD discussion paper identifies a number of principles that I would wish you to keep in mind. In particular, I would ask your deliberations to be guided by four fundamental goals to which the Government is firmly committed, viz:

- the improvement of individual and community well-being and welfare by following a path of economic progress that does not impair the welfare of future generations;
- the provision of equity within and between generations;
- recognition of the global dimension; and
- the protection of biological diversity and the maintenance of ecological processes and systems.

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<sup>751</sup> The Chairs were Dr Roy Green, Director, Institute of Natural Resources and Environment, CSIRO; Professor Stuart Harris, Department of International Relations, ANU; and Professor David Throsby, School of Economic and Financial Studies, Macquarie University.

<sup>752</sup> See *ESD Executive Summaries*, above n 703, Appendix A.

... the achievement of these results will involve, inter alia, increased efficiency of resource use and reduced waste production; management and utilisation practices which improve the resilience of natural resource systems; dealing cautiously with risk and irreversibility; and integration of environmental and social considerations into economic decision-making, including ensuring that environmental assets are appropriately valued.

...

Obviously it is desirable to seek consensus in the recommendations you will be putting to the Government on behalf of your working groups. There may be matters on which this does not prove possible, and alternative views may need to be put. I would hope that such cases could be kept to a minimum ... At the same time, I do not wish to have recommendations that cater to the lowest common denominator of views of working group members and that do little to progress a move towards ecologically sustainable development.

...

Yours sincerely

R J L Hawke

**Box 5.1 Extracts from Prime Minister's 'Charter Letter' to Chairs, ESD Working Groups, 1990<sup>753</sup>**

### 5.3.3 ESD Working Group Deliberations and Reports

The working groups held a complex series of deliberative and public-consultative meetings over a period of a little over a year, while the three Chairs convened separately to prepare reports on 'intersectoral' and greenhouse issues. The discussion paper and Charter letter had clearly not achieved the objective of defining the ESD goal that the working groups were to pursue, because the Chairs soon concluded that 'a single all-encompassing definition of ESD would be elusive'.<sup>754</sup>

Accordingly, the chairs drew together a set of principles upon which ESD could be judged to be based. It was then argued that for an industry or sector to be regarded as 'ecologically sustainable' it would need to conform to these principles ...

In brief, the six agreed principles of ESD were:

- Improving material and non-material well-being

<sup>753</sup> R J L Hawke, letter, 29 August 1990, to Dr Roy Green, Chair, Ecologically Sustainable Development working groups on agriculture, forestry and fishing, in *ESD Executive Summaries*, above n 703, 259.

<sup>754</sup> Stuart Harris and David Throsby, 'The ESD Process: Background, implementation and aftermath' in Clive Hamilton and David Throsby (eds) *The ESD Process: Evaluating a Policy Experiment* (Academy of the Social Sciences in Australia 1998), 6.

- Improving equity between generations
- Improving equity within the present generation
- Maintaining ecological integrity and biodiversity
- Dealing cautiously with risk, uncertainty and irreversibility
- Taking account of global ramifications of our actions, including international cooperation, international trade and international spillovers.<sup>755</sup>

Allowing for some variations in wording, these are essentially the principles set out in the charter letter. Although one might quibble with the chairs regarding ESD as elusive to define, yet achievable through by conformity with these principles, the significance of this enumeration by the Chairs is not in the formulation itself but in demonstrating an understanding of what ESD required.

Apart from the working group reports themselves, the Chairs provided a separate and unpublished report to the Prime Minister in which they identified three themes as summarising many of the recommendations: first, ‘information and analytical processes and methods’, including information systems such as ‘an ecological base-line’ for Australia, new processes of policy analysis and extended modelling effort; second, ‘public consultation and review processes’, due to the ‘great many instances’ where greater access to information and consultation were seen as prerequisites for ‘broader acceptance and understanding of change’; and third, ‘changes to machinery of government to allow for better integration of environmental and economic decision making’, as this ‘represents much of what the ESD process hoped to achieve’.<sup>756</sup> The latter involved ‘establishing or changing values within organisations to consider the spillover effects of decisions and actions on other parts of the system’, an approach corresponding to economic efficiency.<sup>757</sup>

#### *Positive View of the ESD Process*

In their letter transmitting the sectoral reports to the Prime Minister the Chairs described the ESD process as ‘in many ways ... a ground-breaking exercise’, one that took a ‘whole

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<sup>755</sup> Ibid 6–7. The writer was not able to locate this or a similar listing of ESD principles in official records relating to the working groups.

<sup>756</sup> Ecologically Sustainable Development Working Group Chairs, ‘Report to Sustainable Development Subcommittee’ [of Cabinet], December 1991 (NAA A11116, CA1450 Part 1).

<sup>757</sup> Ibid.

of society' approach.<sup>758</sup> They also expressed satisfaction that 'the extent of common ground achieved is remarkable and has been one of the major outcomes of the process'.<sup>759</sup>

The ESD process was mostly regarded positively by participants. Lothian's survey of fellow participants suggests that those working within the process generally saw it in positive terms.<sup>760</sup> Participant-authors argued that the process was innovative,<sup>761</sup> successful in engaging the parties including through reporting arrangements through to a Cabinet sub-committee chaired by the Prime Minister,<sup>762</sup> and productive of a significant (and even unexpected) degree of consensus that also attracted bipartisan political support.<sup>763</sup> In fact, two of the working group chairs found the degree to which working group members could find common ground, given their disparate and strongly held views, to be remarkable.<sup>764</sup> Moreover:

there emerged a clear sense of joint ownership of the broad outcome, and a recognition that the concept of ESD did indeed provide a basis for integrating ecological and economic values, so that agreement on common goals and on ways of achieving them became more feasible.

At the end of the process, when recommendations had to be formulated, the desirability of maintaining a consensual approach was strengthened by the realisation that divided recommendations would have less chance of being accepted ... In the event most Groups were able to live with an agreed set of recommendations ...<sup>765</sup>

This appears to be the real significance of the ESD Process: it offered a foundation for 'substantial action and progress'.<sup>766</sup>

### *Criticisms of the ESD Process*

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<sup>758</sup> *ESD Executive Summaries*, above n 703, Letter of Transmittal, iii-iv.

<sup>759</sup> *Ibid* v.

<sup>760</sup> A survey showed 53% of participants were positive or very positive, while 25% were negative or very negative about working group operation: see Andrew Lothian, 'ESD in State Government decision-making' in Clive Hamilton and David Throsby (eds) *The ESD Process: Evaluating a Policy Experiment* (Academy of the Social Sciences in Australia 1998) 57.

<sup>761</sup> W L Hare, Australian Conservation Foundation and World Wildlife Fund for Nature Australia ESD Policy Unit, *Ecologically Sustainable Development: Assessment of the ESD Working Group Reports* (Fitzroy, Vic.: Australian Conservation Foundation, 1991) 3.

<sup>762</sup> *Ibid*; Harris and Throsby, above n 754 5.

<sup>763</sup> *Ibid* 9, 11; Diesendorf and Hamilton, above n 750, 300; Hamilton, 'Ecologically Sustainable Development: Implications for Governance in Australia', above n 433, 66.

<sup>764</sup> Harris and Throsby, above n 754, 8-9.

<sup>765</sup> *Ibid*.

<sup>766</sup> Hare, ACF and WWF, above n 761, 7.



Despite these positives, the ESD process also attracted a number of significant criticisms, from participants and non-participants alike. Several scholars argued that the process lacked an overall vision and direction, including a vision of a sustainable society, resulting in a failure to define the social goal of ESD authoritatively.<sup>767</sup> Many saw the timetable as too tight, a point acknowledged by the Chairs and one that would later concern the States during the formulation of the NSESD itself.<sup>768</sup> Some argue that the rushing of the process contributed to poor public engagement,<sup>769</sup> a point which would be of great significance if Hamilton's argument proved correct, that the most critical change needed to facilitate ESD was change in public awareness and attitudes.<sup>770</sup> Certainly public expectation of change might have been a counter-weight to what several have argued was the dominance of the ESD process by vested interests, both bureaucratic and private.<sup>771</sup>

A final significant criticism of the ESD process was poor policy integration, both horizontally (within a level of government) and vertically (between levels of government). (This is ironic given that the NSESD would later make policy integration its centrepiece.) Horizontally, Hare commented at an early stage that the ESD process was not well-integrated with other concurrent processes, the (domestic) IGAE, or the Rio Conference.<sup>772</sup> The use of different formulations of ESD principles in the IGAE and the NSESD, discussed in 3.4, lends support to this argument. As to vertical policy integration, Hollander points out that, although State officials participated actively, the Commonwealth paid little attention to State *governments* until the ESD Working Group recommendations confronted the Commonwealth directly with their centrality, a fact to which the Commonwealth responded by attempting to hand much of the responsibility back to States, either directly or through ministerial councils.<sup>773</sup> Similarly, Harris and Throsby argued that State governments were not necessarily committed to the process, being suspicious of increasing federal involvement in traditional state issues.<sup>774</sup>

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<sup>767</sup> Hamilton, above n 433 67; Hare, above n 761, 5. Edwards criticises the failure to clarify the meaning of ESD: Geoff Edwards, 'Economics and Sustainability: A Critique of the ESD Working Group Reports, Paper Presented to 37th Annual Conference of Australian Agricultural Economics Society, University of Sydney' (Australian Agricultural Economics Society 1993) 8.

<sup>768</sup> Hare, above n 761, 6; Hamilton, above n 433, 66; ESD Working Group Chairs, Letter of transmittal, in *ESD Executive Summaries*, above n 703; see also the complaints from States discussed in 5.3 below.

<sup>769</sup> Diesendorf and Hamilton, above n 750, 292; Hare, above n 761 5.

<sup>770</sup> Hamilton, above n 433, 69, 74.

<sup>771</sup> Ibid 66; Diesendorf and Hamilton, above n 750 289–290; Hare, above n 761, 5–6.

<sup>772</sup> Hare, above n 761, 6.

<sup>773</sup> Hollander, above n 371, 24.

<sup>774</sup> Harris and Throsby, above n 754, 11; Hamilton, writing after the release of the draft working group reports, speculated that this may have been the motivation: Hamilton, above n 750, 66.

## 5.4 National Strategy for Ecologically Sustainable Development

To this point the ESD process had been a Commonwealth initiative, with State officials participating as representatives of ministerial councils rather than as representatives of their governments.<sup>775</sup> Contemporaneously with the tabling of the nine working group reports, States, now acting *as jurisdictions*, accepted the Commonwealth's invitation to participate in the process of developing a national response.<sup>776</sup> Governments established a process under which a central group of officials representing all jurisdictions, the ESD Steering Committee,<sup>777</sup> developed a draft strategy, using a complex process involving the grouping of recommendations into 37 key issue areas, to be considered respectively (with increasing scope of recommendations) by ministerial councils; joint arrangements between ministerial councils; or a dedicated sub-group of officials.<sup>778</sup>

### 5.4.1 Negotiation of NSESD Between Commonwealth and States

#### *An Early Change of Policy Tone*

The ESD Steering Committee, charged with developing the NSESD, began meeting just before Keating replaced Hawke as Prime Minister.<sup>779</sup> A comparison between the 'Outline of Initial Implementation Strategy', prepared for that initial discussion with States and before the change of Prime Minister; and the 'Document Outline' draft, prepared one month later, is instructive. The former uses relatively positive language to canvas commitments including the 'practical implementation' of ESD principles, 'innovative' research and development to redress an 'inadequate' knowledge base; 'a deal of' institutional change; 'harnessing widespread community support'; and 'adequate,

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<sup>775</sup> See for example *ESD Agriculture Report* above n 703, v, which lists two state officials (from NSW and SA respectively) as representatives of the Australian Agricultural Council, and a NT official as representing the Australian and New Zealand Environment and Conservation Council; Hede, 'Reforming the Policy Role of the Intergovernmental Ministerial Councils' above n 707.

<sup>776</sup> Australian Government, *Cabinet Minute 15991*, 10 Nov 1991, endorsing Australian Government, 'Special Premiers' Conference November 1991: Report on Ecologically Sustainable Development Progress', *Cabinet Memorandum 8416*, 6 November 1991 (NAA 14023, 8416); Premiers and Chief Ministers Meeting, *Communiqué*, 21–22 November 1991, Adelaide (Premiers and Chief Ministers Meeting 1991).

<sup>777</sup> This group is, confusingly, sometimes also called the 'ESD Working Group'.

<sup>778</sup> Australian Government, 'Initial National Ecologically Sustainable Development Strategy', *Cabinet Memorandum 141*, 17 March 1992 (NAA A14217, 141) 2. The sub-group process was later 'streamlined', to allocate the 37 issues across 22 sub-groups (at 3).

<sup>779</sup> The first meeting was on 11 December 1991: see Ecologically Sustainable Development Working Group, 'Draft Agenda: First Meeting', 11 December 1991 (NAA A463, 1992/66); the change of Prime Minister occurred on 20 December 1991.

appropriate pricing regimes'.<sup>780</sup> The latter adopts a more cautious and even defensive tone, introducing language of 'promoting' ESD and limitations such as trade competitiveness, along with 'short term imperatives and budget constraints'.<sup>781</sup> The papers consist largely of successive drafts and do not reveal the extent to which this change of tone, was driven by the views respectively of the new Prime Minister, the States, or finance and industry departments, but they do lend support to the view already in the literature that the change of Prime Minister was significant for ESD policy.

### *Ready Agreement to Principles of ESD*

A key point emerging from the second draft of the Strategy is that there was relatively early agreement on the principles of ESD: the goals and principles in this draft already bear a strong resemblance to the final version adopted 10 months later, suggesting that the principles were relatively uncontroversial among officials.<sup>782</sup> Further, this draft states that the set of principles as then drafted 'captures the spirit of both the IGAE and the ESD Working Groups', suggesting a pragmatic process of synthesis rather than a process of deduction from the goal of ESD.<sup>783</sup> Governments were focused on things other than the meaning of ESD and the likely impact of the ESD principles on decision-making.<sup>784</sup>

### *Coalescence Around Policy Integration*

Policy integration, in its simple form, remained a strong theme throughout,<sup>785</sup> retaining its place in the introduction to the final strategy:

There are two main features which distinguish an ecologically sustainable approach to development:

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<sup>780</sup> See Department of the Prime Minister and Cabinet, 'Ecologically Sustainable Development: Outline of Initial Implementation Strategy' (NAA A463, 1992/66).

<sup>781</sup> Department of the Prime Minister and Cabinet, 'Document Outline: Australian National Strategy for Ecologically Sustainable Development' (NAA A463, 1992/1159).

<sup>782</sup> See Department of the Prime Minister and Cabinet, 'Second Draft — 13/2/92: Australian National Strategy for Ecologically Sustainable Development' (NAA A463, 1992/66) 5–6.

<sup>783</sup> Ibid 6.

<sup>784</sup> This issue is considered in chapter seven.

<sup>785</sup> See Department of the Prime Minister and Cabinet, above n 782 (second draft) 6, where the second draft of the strategy stated that 'a shorthand description of the objective of ESD is to integrate economic, social, cultural and environmental objectives in all decision-making ...'; see also Department of the Prime Minister and Cabinet, 'Third Draft — 20/2/92: Australian National Strategy for Ecologically Sustainable Development', at 13, which includes the statement that governments had agreed that '[i]ntegration of economic, environmental and social considerations in decision-making processes' was one of several guiding principles that were fundamental to achieving ESD (NAA A463 1992/4589).

- we need to consider, in an integrated way, the wider economic, social and environmental implications of our decisions and actions for Australia, the international community and the biosphere; and
- we need to take a long-term rather than short-term view when taking those decisions and actions.<sup>786</sup>

The pursuit of weak integration was not just a preliminary matter however, but a matter of implementation. The Working Group reports had emphasised that responsibility for implementation of ESD should rest with line agencies (and indeed the community), while also recommending that each government establish an Office of ESD in its first minister's department. Noting this, officials advised Cabinet that it would be inconsistent with an agency-based approach to 'establish a significant bureaucracy to manage the process' and that following the release of the strategy 'central coordination should be able to be scaled down as ESD principles become embedded into the operational charters of line ... agencies.'<sup>787</sup> Officials seemed to assume that agencies could be directed to practise policy integration and that once ESD principles were embedded, they would operate on something of a 'set and forget' basis. This approach was either naive or tendentious: naive because the enormous complexity of ESD and the challenge it posed to vested interests would surely require strong drive from the centre; alternatively tendentious because the advice would align with both the strong markers government had laid down about avoiding new expenditure and expressed State opposition to establishing Offices of ESD.<sup>788</sup>

If the process of responding to the working group recommendations was complex, its execution was, according to two of the Chairs, a 'shambles'.<sup>789</sup> This was no doubt substantially affected by the change of Prime Minister that occurred in December 1991, just after the process had commenced. Not only did new Prime Minister Keating have a different policy style, but he was thought by some to be keen to distance himself from Hawke's initiatives.<sup>790</sup> Nevertheless, as they recount events:

[T]he follow-up to the reports fell into something of a hole.

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<sup>786</sup> NSESD, above n 354, 6.

<sup>787</sup> Australian Government, 'Initial National Ecologically Sustainable Development Strategy', *Cabinet Memorandum 141*, above n 778, 5–6. The submission also notes that States were opposed to establishing offices of ESD, although no reasons are recorded.

<sup>788</sup> Ibid.

<sup>789</sup> Harris and Throsby, above n 754, 13–14.

<sup>790</sup> Ibid.

When inevitably it did regain attention, the initial stages of the process were in the hands of officials totally unfamiliar with the process. They started to debate again the issues that had been thoroughly discussed over the previous two years. As a result, [officials] produced Draft Strategy documents which misunderstood basic distinctions between a strategy for approval by [governments] and an action plan for implementation of recommendations, and which involved a significant dilution of the strength of the original ESD recommendations. These draft strategies were set down for discussion by interested parties, including many who had been members of ESD Working Groups ... in August 1992. In the event, the forum collapsed before the end of the first day, with many delegates refusing to participate and with a widespread view expressed that the ESD process had been 'betrayed'.

Subsequently the post-ESD shambles was restored to some semblance of order with the recall of a senior official from the Prime Minister's department who had been involved in the ESD process itself to sort it out. A final compendium of recommendations was drawn up, with an indication of the responses of the lead agencies to each one ...<sup>791</sup>

As will become apparent below, there is little doubt that officials had *not* misunderstood the distinction between a strategy and an action plan and that government had chosen not to prepare an action plan to implement the working group recommendations. Governments would later publish the *Compendium* as an 'accompanying document' to the NSESD in December 1992 in an attempt to assuage interest group concern about the absence of an action plan (or because, as officials would later put it to Cabinet in understated terms, an account of government responses to all the recommendations was 'of central concern to all the interest groups').<sup>792</sup>

Returning to the development of the Strategy earlier in 1992, the Commonwealth pushed for an early (if partial) response, an approach resisted by the States given the significant financial and economic implications of measures under consideration.<sup>793</sup> The compromise was that a *draft* strategy be released instead.<sup>794</sup> The draft was strongly criticised by interest

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<sup>791</sup> Ibid.

<sup>792</sup> *Compendium*, above n 703; Australian Government, 'National Strategy for Ecologically Sustainable Development', *Cabinet Memorandum* 782, above n 379, 3.

<sup>793</sup> Australian Government, 'Initial National Ecologically Sustainable Development Strategy', *Cabinet Memorandum* 141, n 778 above; decision recorded in *Cabinet Minute* 251 (NAA A14217, 141) 3; Australian Government, 'Ecologically Sustainable Development and National Greenhouse Response Strategies — Progress Report' *Cabinet Memorandum* 241 (1 May 1992), decision recorded in *Cabinet Minute* 342, 4 May 1992 (NAA A14217, 241) 2.

<sup>794</sup> See Heads of Government, *Heads of Government Meeting, Canberra 11 May 1992: Communiqué* (Heads of Government 1992), <<https://pmtranscripts.pmc.gov.au/sites/default/files/original/00008507.pdf>> (viewed 21 June 2018); Ecologically Sustainable Development Steering Committee, 'Draft National Strategy for Ecologically Sustainable Development: A Discussion Paper', above n 380.

groups (including through the difficult consultation described above). The fundamental criticism was the failure of governments to accept and provide for implementation of the ESD working group recommendations, but other criticisms were a failure to assess policy impacts and failures to prioritise and assign responsibility for measures and poor policy integration.<sup>795</sup> When officials returned to Cabinet they returned fire, criticising the Working Group recommendations:

Though the recommendations have provided a valuable basis for the development of the [NSED], many of the Working Groups failed to assess their costs or implications for other policies. Many called for actions which governments were already undertaking. A number of the recommendations were also inconsistent, highly generalised or insufficiently developed to assess adequately the nature and extent of the impacts without considerable analytical work.<sup>796</sup>

#### 5.4.2 The NSED as the Path of Least Resistance

From mid-1992 the advice to government became harder-edged, perhaps reflecting the crystallising of the obstacles described above and the pressures of time. First, officials advised Cabinet that State cooperation was crucial given their responsibilities but that:

The States ... are not strongly committed to either of these [national ESD and national greenhouse] strategies but appear to see involvement in their preparation as having the potential to minimise any adverse effects to them of unilateral Commonwealth action.<sup>797</sup>

States were also attempting to bring other Commonwealth policy processes, such as biodiversity, under the ESD umbrella to increase their policy influence.<sup>798</sup> Despite State concerns about haste, interim and substantive strategies were needed that same year to 'maintain public credibility and peak interest group commitment.'<sup>799</sup>

#### *Critical Brief Marks a Turning Point*

Later, following public comment on a draft of the strategy and the collapsed stakeholder forum, and with officials also finding the working group recommendations unsatisfactory

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<sup>795</sup> Australian Government, 'National Strategy for Ecologically Sustainable Development', *Cabinet Memorandum* 782, above n 379, 2.

<sup>796</sup> Ibid.

<sup>797</sup> *Cabinet Memorandum* 241, above n 793 2.

<sup>798</sup> Ibid 3.

<sup>799</sup> Ibid 2.

as a basis for policy, the advice to the Prime Minister from the Department of Prime Minister and Cabinet, ('PM&C') was both blunt and pragmatic (see Box 5.2).

Prime Minister  
(for information)

## ESD AND GREENHOUSE STRATEGIES

The purpose of this note is to provide a basis for discussion with you of the future direction of and objectives for the ESD and greenhouse strategies ...

... The points which bear most closely on future handling of this area are:

- the unsatisfactory nature of many of the recommendations in terms of a menu of actions for immediate implementation. Even though as a body of material they provide a useful foundation for future work, they are individually and variously, vague, uneasy compromises between opposing points of view which leave key issues unresolved, are duplicative, and inadequate in their analysis implications (particularly for the economy) of the courses of action advocated.
- not all States and Territories were represented on each of the ESD Working Groups. Hence they have been reluctant to accept ownership recommendations, harbouring suspicions, in varying degrees, that this Commonwealth agenda setting exercise for which the States will have to majority of costs (overwhelmingly day-to-day responsibility for the matters covered by the recommendations rests with States and local government).
- the very heavy commitment of NGO<sup>800</sup> resources ... to the ESD Working Group process which, in generated a very strong sense of NGO 'ownership' of the 500 or so Working Group recommendations. (The NGOs are uniformly of the view that process is 'off the rails', despite, they claim, the ESD recommendations offering to governments a unique consensus of views from disparate NGOs.)

...

... In the light of public comment on the draft strategies, we plan to prepare a more succinct strategy document covering principles, objectives and broad approaches in language suitable for Heads of Government endorsement and for wide public circulation. Such a document would provide clear authority and impetus for action both inside and outside government.

...

Pressure here is greatest from the conservation groups who are demanding immediate action to implement many of the recommendations, with joint NGO/government oversight of implementation. Business and unions also want to see more action but, at the same time, insist on having a clearer idea of the economic and social implications of the recommendations to which they signed up:

- these groups have been discussing the preparation of a sub-set of recommendations on which they could all agree to press for immediate implementation for presentation at the Roundtable — they have so far been unable to reach agreement. The basic problem is disagreement over the meaning of 'implementation' — environment groups want immediate introduction of measures while business and unions stress the need for careful examination implications of measures before they are implemented.

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<sup>800</sup> This term refers to 'non-government organisations'.

...

## THE WAY FORWARD

The issues addressed under the ESD umbrella are vital to the future well-being of Australia through the provision of a more stable and predictable policy context from the point of view of both business and environment concerns. It goes to the heart of the way decisions are made about responsible development in areas such as agriculture, fisheries, mining, forestry, tourism. For this to be achieved there be agreement at a national level on the principles which should guide policy development and administration and on a set of specific actions areas/sectors. There are close parallels with and, in key areas such as electricity, vital linkages to, the microeconomic reform agenda:

- many, if not all, the issues demand a nationally agreed approach. The underlying environmental problems are interconnected and do not respect jurisdictional boundaries. Failure to recognise and to adopt ESD principles in areas like water pricing, electricity supply and urban planning has reduced welfare as measured by national income and compromised quality of life.
- the absence of a national approach promotes inconsistencies between the Commonwealth and forum shopping by interest groups of every hue, thus creating uncertainty for everyone.

...

The future approach to ESD is very much a matter of political judgement but we would offer the following comments:

- the NGOs demands for action on their recommendations ignore the fact that many of the underlying issues addressed by their recommendations have been and subject of substantial governmental action.
- ...
- unless handled very carefully, a Commonwealth statement which seeks to national agenda for what are predominantly State responsibilities would confirm State suspicions about the Commonwealth's intentions in this area. This could jeopardise sensible policy formulation in this area and State cooperation important issues on the Commonwealth/State agenda ...

### **Box 5.2 Extracts from Departmental Minute to Prime Minister on Finalisation of ESD Strategy, 1992<sup>801</sup>**

Seeking to reconcile, on the one hand, a push by environment groups for immediate measures with the concerns of business and unions that measures be examined carefully before implementation; and on the other the need to provide a stable, predictable and consistent policy context without jeopardising both 'sensible policy formulation' (ie avoiding the political, constitutional and financial risks of intervening in matters managed by the States) and State cooperation on other issues, the department was proposing a

<sup>801</sup> Department of the Prime Minister and Cabinet, 'ESD and Greenhouse Strategies', Minute to Prime Minister, 14 September 1992 (NAA A463, 1992/4888).



‘succinct’ strategy document covering principles, objectives and ‘broad approaches’ and ‘ground rules’ that would provide ‘clear authority and impetus’ for action without actually taking or even funding that action. Mechanisms such as the IGAE would serve to integrate policy in support of this approach.

It was a politically neat attempt to go through the middle. In effect, the advice was that much could be achieved by basing a strategy around a set of policy precepts that could be left to each jurisdiction to implement. Additional spending was not warranted because environmental groups had already done fairly well through environmental programs and in any event could not all be satisfied, and it would avoid the high costs of forcing unwanted reforms on the States, who had not been properly engaged through the ESD process. What was unsaid was that the greatest risks lay in policy failure; that ‘authority and impetus’ would not substitute for compulsion and investment.

### *The Final Approach Emerges*

This advice must have been taken. The subsequent Cabinet memorandum reflects the recommended approach and the advice has the tone of giving the Government comfort. Officials explained that the revised strategy was ‘essentially an umbrella document’ for other initiatives, with a ‘secondary focus’ on certain sector-specific measures.<sup>802</sup> It took ‘an incremental rather than a radical approach’ and was intended to ‘give an ESD perspective to current policy directions ... rather than override them.’<sup>803</sup> More than 80% of over 500 recommendations had been accepted in full or in part, with others still under consideration and although subject to final State endorsement, the strategy essentially represented ‘a consensus between jurisdictions.’<sup>804</sup> Beyond some new spending in the most recent Budget, no new funding was needed.<sup>805</sup>

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<sup>802</sup> Australian Government, ‘National Strategy for Ecologically Sustainable Development’, *Cabinet Memorandum* 782, above n 379, 3.

<sup>803</sup> Ibid.

<sup>804</sup> Ibid 3–4. Dovers would later point out that some 34% were ‘accepted’ while 46% were ‘accepted in the following manner (ie amended)’ and that ‘[o]ften, it was put than an existing government policy was sufficient, an interpretation often not agreed with by working group members ...’: Stephen Dovers, ‘Discrete, Consultative Policy Processes: Lessons from the National Conservation Strategy and National Strategy for Ecologically Sustainable Development’ in Stephen Dovers and Su Wild River (eds), *Managing Australia’s Environment* (The Federation Press 2003) 143.

<sup>805</sup> Ibid 6.

The Commonwealth had executed a pivot. The Strategy reacted to and drew on the ESD Working Group recommendations, but its heart was a set of principles intended to act as a template for policy integration, not the practical sector-based measures originally envisaged.

Despite the perceived inadequacies of the recommendations, officials advised that they had 'significantly revised and restructured the Strategy' in light of interest group criticism. Cabinet endorsed the revised approach and agreed specifically to a proposed goal, objectives and guiding principles, still consistent with SS.<sup>806</sup> With the Compendium containing responses to the working group recommendations, the Strategy itself had a general tone, setting out objectives such as 'foster[ing] a conservation ethic', supported by open-ended actions such as 'assess the current rate of native vegetation clearing on a national basis'.<sup>807</sup> There was no implementation plan to assign responsibilities or set targets or deadlines; nor were there any associated budget allocations.<sup>808</sup>

The Council of Australian Governments endorsed the NSESD at its first meeting on 7 December 1992, 'noting that implementation would be subject to budgetary priorities and constraints in individual jurisdictions'.<sup>809</sup> Unsurprisingly, environmental groups were disappointed with the NSESD, while industry groups were relieved to have avoided more radical measures.<sup>810</sup>

### 5.4.3 Subsequent Environment Statement: An Attempt at Appeasement?

With the NSESD agreed, the Prime Minister made a statement on the environment announcing a package of measures under the title 'Australia's Environment: a Natural Asset' ('1992 Statement').<sup>811</sup> An adviser in Minister Kelly's office had argued the importance of the statement as a follow-on from the ESD commitments:

The statement needs to demonstrate that the Government is taking the ESD agenda forward.

There seems little doubt that the ESD Strategy which is likely to be endorsed at COAG will be

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<sup>806</sup> Ibid 1.

<sup>807</sup> See NSESD, above n 354, 56 (Objective 11.1).

<sup>808</sup> See 5.5 below for discussion of a stand-alone budget measure that did have some general links with the NSESD.

<sup>809</sup> Council of Australian Governments, *Communique* (COAG, Perth, 7 December 1992).

<sup>810</sup> Harris and Throsby, above n 754, 15.

<sup>811</sup> Paul Keating, 'Australia's Environment: A Natural Asset', Statement on the Environment (Prime Minister, 21 December 1992, Adelaide) ('1992 Statement').

criticised by both greens and industry as grossly inadequate ... The statement should be a central plank of a credible Commonwealth response to ESD.<sup>812</sup>

However, apart from a formal cross-reference on the cover page to the Cabinet submission, that the Statement would 'present the Commonwealth vision for future environment policy and augment and build on the measures in the strategies [relating to ESD] ...', Keating made no mention of the Statement as a vehicle for achieving ESD. He advised Cabinet that the rationale for a statement was 'compelling', but substantiated this principally by reference to there having been major developments since the last major statement on the environment over three years earlier.<sup>813</sup> The statement was designed to 'ensure full public recognition of these achievements, and the Government's overall record of progress since taking office ...' and would, therefore, 'present a consolidated account of our achievements and chart a path for future development of policies affecting the environment which will demonstrate continuing commitment to the environment in ways which secure our economic well-being ...'.<sup>814</sup>

The Statement was hardly the central plank in a credible ESD response that the adviser had argued was needed. It made only passing reference to ESD and, strangely, no mention of the NSESD. Several energy initiatives were identified as being ESD working group recommendations while the announcement of a National Reserve System, a significant NSESD commitment, was not identified as such and would have been required in any event by the Biodiversity Convention, which Australia had recently signed.<sup>815</sup> The package was otherwise routine from the perspective of environment policy. It identified three key themes of water quality; native vegetation and forests; and 'A Cleaner Australia' and was supported by a number of modest spending initiatives; and announced the government's intention to ratify the biodiversity and greenhouse conventions. As the Department of Finance advised Cabinet:

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<sup>812</sup> Tony Fleming, Office of Minister for the Environment, note to Simon Balderstone, Prime Minister's Office, Attachment to internal departmental note, 16 November 1992 (Department of the Arts, Sport, Environment, Tourism and Territories file 92/8732).

<sup>813</sup> Australian Government, 'Prime Minister's Environment Statement — Possible Policy Initiatives', 28 November 1992, *Cabinet Submission 891*, 28 November 1992, (NAA A14217, 891) [2].

<sup>814</sup> *Ibid* para 3.

<sup>815</sup> 1992 Statement, above n 811, especially at 1, 21. The establishment of the NRS was Objective 10.1 in the NSESD, but Article 8(a) of the *Convention on Biological Diversity*, which Australia had signed earlier in 1992, provided that 'Each Contracting Party shall, as far as possible and as appropriate ... [e]stablish a system of protected areas or areas where special measures need to be taken to conserve biological diversity': see further discussion in chapter 6.

[t]he majority of the proposed initiatives represent little more than an expansion of existing programs.

...

Finance believes that there is scope for the announcement of a credible environment statement which reinforces the Government's policy position ... consistent with ESD principles, which does not involve significant additional expenditure.<sup>816</sup>

In the absence of a significant policy narrative, it is reasonable to infer that the Government was seeking to mollify environment groups for their disappointment at the ultimate outcome of the ESD Process. It certainly seemed that the Government did not want to connect the Statement with the NSESD.

## 5.5 Analysis of the Policy Substance of the NSESD

The Strategy has been criticised heavily, most telling as a general retreat from the working group recommendations.<sup>817</sup> Space prevents a reconciliation of over 500 working group recommendations with the 76 objectives (in 33 sections) of the NSESD, but it is feasible to consider both the general policy tone and trajectory by reference to a sample of the recommendations and through a general analysis, as seen below.

### 5.5.1 Progressive Retreat of Ambition and Effort: A Worked Example of ESD Working Group Recommendations and Government Responses including the NSESD

This analysis of the recommendations of the Agriculture Working Group in Table 5.1 draws on three key documents associated with the NSESD: the ESD Agriculture Working Group Report;<sup>818</sup> the detailed government responses set out in the *Compendium of Ecologically Sustainable Development Recommendations*; and the NSESD itself. The object is to demonstrate with greater objectivity and precision how the gap between the policy goal of ESD and levels of policy ambition widened over time. Policy ambition was classified according to the environmental policy hierarchy in chapter one and the analysis has three

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<sup>816</sup> *Cabinet Submission 891*, above n 813, Attachment D, 'Coordination Comments'.

<sup>817</sup> Diesendorf and Hamilton, above n 750, 293–294.

<sup>818</sup> *ESD Agriculture Report*, above n 703.

components.<sup>819</sup> First, the writer analysed the text of the Agriculture Working Group Report qualitatively, to distil its high-level policy narrative. Second, the working group recommendations and government responses (generically, ‘measures’) were tabulated, identifying the policy narrative for each measure in short form, before classifying each by policy tier, and identifying whether responses relied, partially or wholly, on existing measures (see Table 5.1). Measures that contained several components were classified according the policy tier of the component with the highest level of policy ambition. Finally, the same analytical approach was applied to the NSESD itself.

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<sup>819</sup> See Table 1.1.

Topic or Theme	Recommendation	Policy Narrative	Highest Policy Level	Government Response (short form)	Addressed in NSED?	Policy Level	Relies on Existing Measures?
Resource Management	r 1: Support ESD in agriculture by incorporating environmental & economic principles into land management, support self-help, integrated farm planning	Policy integration, volunteerism	2	r1. Accepted. Part reflected in existing policies	Yes, s 1 Agriculture	2	Yes
		Volunteerism	n/a	r2. Accepted in following manner	Yes, s 1 Agriculture	2	Yes
	r3. Strengthen integrated catchment management programs	Policy integration	2	r3. Accepted	Yes, s 1 Agriculture s 18 Water Resource Mgt	2	Yes
	r4. Support whole-farm planning approach	Policy integration	2	r4. Accepted in following manner	Yes, s 1 Agriculture	2	Yes
	r5. Streamline and make consistent regulatory approvals	Reduce regulatory burden	3	r5. Accepted	Yes, s 1 Agriculture	3	No
	r6. Use pastoral leases to promote ESD & secure tenure	Incentives for sustainability	5.3	r6. Accepted in following manner	Yes, s 1 Agriculture, but need further consideration;	5.2	No
	r7. More effective pest management approaches	Problem-specific	1	r7. Accepted in following manner	Yes, s 1 Agriculture	1, 2	Yes
	r8. Encourage private conservation & tighten native vegetation regulation	Sustainability by protecting native vegetation	5.3	r8. Accepted in following manner	Yes, s 11 Native Vegetation; 'some issues are still under consideration'	5.2	Yes
	r9. Support multiple land uses but pay compensation for conservation	Equity in burden-sharing	3	r9. Accepted in following manner	Yes, s 10 Nature Conservation System, s 13 Land Use Planning	2	Yes
	r10. Government assistance for on-farm environmental resource-efficiency	Encourage efficiency with incentives	3	r10. Accepted in following manner; consistent with existing policy	Yes, s 1 Agriculture	3	Yes
Water	r 11. Water - market-based approaches for resource-efficiency.	Economic efficiency	3	r 11. Accepted in following manner	Yes, s 18 Water Resource Management	3, 2	Yes
Chemicals	r12. Act on Senate report on agvet chemicals	Technical efficiency, competitiveness	1	r12. Accepted in following manner	Yes, s 4 Manufacturing	1	Yes
	r13. Review surveys re chemical residues	Human health, competitiveness	1	r13. Accepted	Yes, s 1 Agriculture, s 4 Manufacturing	1	Yes
	r14. Revise research & monitoring re agvet chemicals	Support the above two recommendations	1	r14. Accepted in following manner	Yes, s 1 Agriculture, s 25 Occupational Health, Safety	1	Yes
	r15. Set targets for reduced use of agricultural chemicals	Human health, competitiveness	1	r15. Accepted in following manner	Yes, s 1 Agriculture	1	Yes

Table 5.1 Analysis of Recommendations of ESD Agriculture Working Group

Topic or Theme	Recommendation	Policy Narrative	Highest Policy Level	Government Response (short form)	Addressed in NSED?	Policy Level	Relies on Existing Measures?
Education and Extension	r16. Identify ESD principles more clearly in education courses	Support policy through education & training	n/a	r16. Accepted	Yes, s 26, Education and Training	n/a	Yes
	r17. Train community leaders [in environmental resource management]	Support policy through education & training	n/a	r17. Accepted	Yes, s 1 Agriculture, s 23 Gender issues	n/a	Yes
	r18. Financial support for community leaders	Support policy through investment	n/a	r18. Accepted in following manner	Yes, s 1 Agriculture	n/a	Yes
	r19. Develop & implement decision-support packages	Support policy through education & training	n/a	r19. Accepted in following manner	Yes, s 1 Agriculture	n/a	Yes
Research	r20. Promote & facilitate research into agricultural sustainability	Better-informed decisions	2	r20. Accepted	Yes, s 1 Agriculture	2	Yes
	r21. Research to develop agricultural systems that incorporate ESD objectives	Better-informed decisions	2	r21. Accepted	Yes, s 1 Agriculture	2	Yes
Institutional Arrangements	r22. Agricultural agencies review objectives and incorporate ESD	Policy integration	2	r22. Accepted	Yes, s 16, Changes to govt institutions & machinery	2	Yes
	r23. Consider integrating agricultural resource policy	Policy integration	2	r23. Accepted	Yes, s 1 Agriculture, s 16, Changes to institutions etc	2	Yes
	r24. Better coordinate resource management programs	Policy integration	2	r24. Accepted	Yes, s 1 Agriculture	2	Yes
Global Warming	r25. Consider agricultural contributions to GHG reduction on cost-effectiveness and equity with other sectors	Equity in burden sharing	2	r25. Accepted in following manner	Responses through National Greenhouse Response Strategy	2, 3	No
	r26. Promote certain GHG reduction measures in agricultural sector.	Specific efficiency-based measures	3	r26. Accepted in following manner	Yes, s 1 Agriculture	3	Yes
Progress Reporting	r 27. Five year reviews plus national monitoring system	Policy integration	n/a	r27. Accepted in following manner	Yes, s 1 Agriculture, s 33, Monitoring and Review	n/a	No
*Notes							
1. Columns 1 and 2 use the same system of numbers & letters that is used in the Compendium of Ecologically Sustainable Development Recommendations (Compendium). The remaining columns use the author's terminology and classifications as described in the text and summarised below.							
2. 'Policy narrative' is the author's brief summary of the rationale (express or implied) for the recommendation, as found in the relevant Working Group report.							
3. 'Tier' is the policy tier from the author's typology of environmental policy at Table 1.x.							
4. n/a = 'not applicable'							

Table 5.1 Analysis of Recommendations of ESD Agriculture Working Group (cont'd)

*Analysis of ESD Working Group Report: Agriculture*

The policy narrative of the Agriculture Working Group Report was consistent with the formal aspiration, corresponding to SS. The report stressed both economic efficiency and a shift to the longer-term maintenance and improvement of resources. The report made it clear that the working group understood both the need to maintain natural capital and the difference between SS and WS (though without using those terms).<sup>820</sup> This was expressed succinctly as:

The development of a broader understanding of the need to maintain economic activities within a safe environmental envelope is essential if society is to make informed choices ... between options that construe environmental and economic objectives as mutually achievable goals.<sup>821</sup>

And again:

The traditional concept of sustainable yield applied to organisms and to ecosystems will need to be broadened to include the protection of biological diversity and maintenance of ecological integrity. Due account will need to be taken of uncertainty and of the risk of irreversibility when managing natural systems on an ecologically sustainable basis.<sup>822</sup>

The working group adopted a general approach based on identification of agricultural impacts on the environment; the prevention of future damage and repair of existing damage (with a focus on the former); and addressing causes rather than effects.<sup>823</sup> It also identified six 'priority objectives' that are consistent with this general approach and reflect sustainability concepts of maximising economic efficiency while maintaining ecological integrity.<sup>824</sup>

The working group stressed their preference for a 'bottom-up' approach to resource management, 'which allows individuals and local communities to take direct responsibility for identifying problems and developing and implementing solutions' and assigns to

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<sup>820</sup> Ibid 7.

<sup>821</sup> Ibid 8.

<sup>822</sup> Ibid 10.

<sup>823</sup> Ibid 137, 140. A final criterion proposed by the working group, that 'strategies must be workable' is omitted here as it embodies general considerations of effective implementation such as practicality and timing rather than policy objectives.

<sup>824</sup> Ibid, Table 7.1. The table is too long to reproduce here but, overall, reflects SS.



governments the responsibility of providing a supporting institutional and regulatory framework.<sup>825</sup> While one might query whether such a ‘bottom-up’ approach would be an effective vehicle for imposing the constraints likely to be needed to maintain ecological integrity, the more important point is that the substance of the working group’s recommendations does not match the policy narrative of SS. The analysis at Table 5.1 shows that only two of 27 recommendations correspond to strong sustainability (Policy Tier 5.2). Of the remainder, four were directed to economic efficiency (Policy Tier 3), nine to simple policy integration (Policy Tier 2) and four to ad hoc policies not directly connected to sustainability (Policy Tier 1). The correspondence is even weaker than it appears, given that the classifications represent the *highest* level found in what are often compound recommendations.

### *Government Responses*

Superficially, governments were very responsive to the recommendations on agriculture. Of 27 recommendations, 11 were accepted and 16 accepted in a specified manner. The picture remains the same when the responses are analysed by policy tier: Table 5.1 shows that government responses were overwhelmingly on the same policy tier as the recommendations, while Table 5.2 shows that the objectives and actions in the NSESD also corresponded broadly to the levels of recommendations.

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<sup>825</sup> Ibid 142.

Section	Summary of Content	Policy Narrative	Modal Policy Level
Challenge	Agriculture contributes to the economy while protecting the biological and physical resource base on which agriculture depends. Improve human health.	Goals of ESD and improved health	5.3
Strategic Approach	Promote use of land and water to improve profitability and production, while maintaining ecological systems. Support through cooperation between governments and community.	Goal of ESD	5.3
Objective 1.1	Create a framework of integrated government approaches that promote community-based management, by: tax deductions; improve community participation on agricultural resource decisions; simplifying programs; improving efficiency of decisions; policy integration in Ministerial Councils; using lease clauses to encourage sustainable management; policy integration in catchment management.	Technical efficiency; preference for certain policy means (eg participation); lease clauses to promote sustainable management; policy integration	2
Objective 1.2	Promote integrated agricultural planning; encourage information transfer and sustainable management by landholders, through: group approaches to resource management; farm planning; property management plans & their integration with catchment plans; better risk assessment under Drought Policy; research in sustainable land & water management; policy review.	Policy integration, risk management, research	2

Table 5.2 Analysis of Chapter 1 of NSESD (Agriculture)

Section	Summary of Content	Policy Narrative	Modal Policy Level
Challenge	Agriculture contributes to the economy while protecting the biological and physical resource base on which agriculture depends. Improve human health.	Goals of ESD and improved health	5.3
Strategic Approach	Promote use of land and water to improve profitability and production, while maintaining ecological systems. Support through cooperation between governments and community.	Goal of ESD	5.3
Objective 1.1	Create a framework of integrated government approaches that promote community-based management, by: tax deductions; improve community participation on agricultural resource decisions; simplifying programs; improving efficiency of decisions; policy integration in Ministerial Councils; using lease clauses to encourage sustainable management; policy integration in catchment management.	Technical efficiency; preference for certain policy means (eg participation); lease clauses to promote sustainable management; policy integration	2
Objective 1.2	Promote integrated agricultural planning; encourage information transfer and sustainable management by landholders, through: group approaches to resource management; farm planning; property management plans & their integration with catchment plans; better risk assessment under Drought Policy; research in sustainable land & water management; policy review.	Policy integration, risk management, research	2

Table 5.2 Analysis of Chapter 1 of NSED (Agriculture) (cont'd)

However, a number of factors reveal that government support for the recommendations was much lower than it might seem. First, the great majority of the responses in the Compendium (23 out of 27) rely at least in part on existing measures as delivering the promised response.<sup>826</sup> Second, many of the measures that do commit on their face to new policy or action are either general in nature or qualified and contingent on subsequent policy decisions, decisions that would have to be made in the face of whatever constraints and opposition might exist at that later point and in isolation from policy momentum of the original response. Finally, some measures are highly complex and involve diffuse responsibilities and accountabilities.

Recommendation nine exemplifies the latter two points. The recommendation was that governments support the use of private agricultural land for multiple purposes, including conservation, and compensate owners where land use is restricted for conservation reasons, resulting in hardship or non-viability. The government response stated an objective that governments would 'encourage' land-use decisions that take full account of all relevant resource values and included commitments to 'continue efforts to clarify, rationalise and publicise' relevant policies, finalise current reviews, and to 'promote' multiple and sequential land use.<sup>827</sup> The response also called up existing ANZECC work to develop a national biodiversity strategy (see chapter six) and promised a further joint review by two ministerial councils (ie by at least two agencies from each of nine jurisdictions) of the effectiveness of existing native vegetation and wildlife protection.<sup>828</sup> With respect to compensation for restrictions on land use, the response was confined to the more straightforward issue of government *resumption* of land, avoiding the complex issue of compensation for regulatory constraints on agricultural production, other than to cross-refer to the response to recommendation 8, which promised the 'cooperative development' of incentives to encourage land managers to protect native vegetation.<sup>829</sup> Finally, the response allocated responsibility to all jurisdictions and to two ministerial councils.<sup>830</sup> Anyone attempting to monitor the implementation of this response would have needed to track multiple measures through at least two agencies in each jurisdiction, plus two intergovernmental bodies.

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<sup>826</sup> Dovers has also made this point: see Dovers and Wild River, above n 804.

<sup>827</sup> *Compendium*, above n 703, 15 (response to recommendation 9).

<sup>828</sup> *Ibid.*

<sup>829</sup> *Ibid* 15–16; 13 (rec 8).

<sup>830</sup> *Ibid* 16.

*Agriculture Sector Measures in the NSESD*

The policy level of the agriculture sector measures in the NSESD was broadly the same as the government responses to the working group recommendations — distributed around simple policy integration, with some reflecting a higher level of ambition of economic efficiency, while several others, worthy as they might be, were ad hoc. The greater weakness in the Strategy is the one already identified in the literature — a high level of generality accompanied by a lack of visible means of implementation, including institutionalisation, resourcing, oversight, monitoring or accountability. In fact, the Strategy was not a strategy at all, in the sense of ‘a plan designed to achieve a particular long-term aim’.<sup>831</sup> It lacked the necessary detail, the means to achieve the ends. Rather, much as officials had advised Cabinet, the strategy was an umbrella document adding an ‘ESD perspective’ to current policy directions. It was more a statement of policy aspiration and intent; in five out of 22 agriculture-related measures that intent was to continue existing action.<sup>832</sup>

*The Nature of the Progressive Policy Retreat*

The analysis for agriculture suggests that the working group recommendations were, in general, at a lower policy tier than the goal of ESD, most often directed to simple policy integration. Perhaps surprisingly, the government responses for agriculture in the Compendium and in the Strategy itself did not lower the level of formal ambition further. Instead, the impact of the responses and the measures in the Strategy was reduced by watering them down.

**5.5.2 General Approach of NSESD**

If the recommendations for the agriculture sector analysed above are typical of the general approach of working group recommendations, and there is reason to think they are, given the Prime Minister’s request for consistency and the extensive coordination efforts documented by the three Chairs,<sup>833</sup> then there was a general retreat, over the entire process, from the high formal ambition of ESD to the working group recommendations, and from

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<sup>831</sup> *Australian Oxford Dictionary* (2<sup>nd</sup> ed, Oxford University Press) definition of ‘strategy’.

<sup>832</sup> See NSESD, above n 354, chapter 1, ‘Agriculture’.

<sup>833</sup> Prime Minister, ‘Charter Letter’, above n 753; Ecologically Sustainable Development Working Group Chairs, ‘Report to Roundtable on Ecologically Sustainable Development Working Groups’ (NAA A11116, CA4150 Part 1) 1, 2–3. In addition to each of the three chairs chaired three working groups, there were specific discussions of ‘cross-sectoral’ issues such as land management.

there to the NSESD. However, the form of the retreat was generally not to move overtly to a lower policy tier, for example by replacing a recommendation for economic efficiency with one for simple policy integration. Rather, it was to weaken the substance and impact of the recommendations, for example by agreeing to the recommendation but claiming that it was already being implemented under existing policy, or by agreeing in principle and either taking no action, or deferring action to unspecified times or open-ended processes. Another means of retreat was to agree, but without providing the substance of implementation, such as additional resources, allocation of tasks and performance measures. The general approach was one of hollowing-out.

Yet the Strategy was not just a hollowed-out version of the working group recommendations. Evaluating the NSESD more generally, Bührs and Aplin argue that the Strategy had a weak rational basis, giving rise to limitations that ‘inevitably show up in its implementation’:

[I]ts principles, objectives and means ... do not appear to be based on a coherent analytical framework and a comprehensive, rigorous study of problems, how these are interrelated, where the nodal or pressure points among factors are located, and the relative merits of different courses of action. Rather, the Strategy's analysis is very general, more in the nature of an inventory of problems and goals, with limited suggestions about possible solutions ... Little information is provided about the scale or nature of the problems, partly as a reflection of the many gaps in Australian environmental data. Nor is it clear how progress towards reducing or resolving these problems can or will be measured ...<sup>834</sup>

Certainly the NSESD is brief and general, and its commitments highly qualified. While it sets out, for each of its 33 mostly sector-based sections, a ‘challenge’, ‘strategic approach’ and ‘objectives’ followed by numerous actions, these are all cast in general terms. For example, under section 2, ‘Fisheries Ecosystem Management’, the ‘challenge’ is to ‘provide a more wholistic and sustainable approach to management of aquatic resources’, while the ‘strategic approach’ includes enhancing decision-making capacities through improved data and research, policy integration, and stakeholder awareness ‘in conjunction with rationalisation of fishing capacity in over-exploited areas’.<sup>835</sup> Supporting actions range from specifics such as a review of fishing fleet capacity by fisheries authorities, through more

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<sup>834</sup> Ton Bührs and Graeme Aplin, ‘Pathways Towards Sustainability: The Australian Approach’, 1999 42(3) *Journal of Environmental Planning and Management* 315, 324.

<sup>835</sup> See NSESD, above n 354, Section 2.

general measures such as establishing a ‘joint specialist working group to identify core state of the aquatic environment indicators’, to the very general ‘continue to cooperate on strategies to control the introduction and translocation of aquatic species’.<sup>836</sup> Even for discrete measures assigned to identifiable agencies such as ‘fisheries management authorities’, there were no timelines, implementation plan or budget allocations. Rather, in a largely passive approach, governments would develop performance indicators ‘in the context of current program responsibilities ... [to] enable reporting’,<sup>837</sup> while governments would determine budgetary priorities in the light of ‘the very significant budgetary constraints facing all levels of government for the foreseeable future ... against other competing demands for public funding.’<sup>838</sup>

## 5.6 Implementation, Review, and Fading from View of the NSESD

The NSESD assigned implementation to several existing Ministerial Councils. It also specified that implementation be reviewed one year after endorsement and two yearly after that.<sup>839</sup> These reviews were conducted by committees of officials.<sup>840</sup> The first implementation report was presented to COAG in 1993, followed by a second and, as it turned out, final, implementation report in 1996. Other reviews and further scholarly evaluation would follow.

### 5.6.1 Formal Implementation Reviews

The first report covered only one year. Given the absence of timelines or performance measures it was discursive and general. Implementation was not just devolved to jurisdictions and agencies, as discussed above, but was diffuse: as the environment department’s annual report for 1993–1994 put it, ‘[s]pecific obligations arising out of the [NSESD] are given effect through most of the department’s environment programs.’<sup>841</sup> The overview of the implementation report summarised progress as ‘instrumental in the initiation of a number of projects, studies and actions’ and noted that jurisdictions had

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<sup>836</sup> Ibid.

<sup>837</sup> NSESD, above n 354, Objective 33.2.

<sup>838</sup> NSESD, above n 354, 18.

<sup>839</sup> Ibid.

<sup>840</sup> At first, the ESD Working Group was continued but in 1993 an ongoing policy-integration committee was established, the Intergovernmental Committee for Ecologically Sustainable Development (ICESD): Paul Keating, Prime Minister, letter to Premiers and Chief Ministers, 14 April 1993 (NAA A463 92/0339).

<sup>841</sup> Department of the Environment, Sport and Territories, *Annual Report 1993–94* (DEST 1994) 18.

reported 'a wide range of ESD initiatives that are promoting an ESD ethos.'<sup>842</sup> A key activity prior to the next review was to be the development of performance measures.<sup>843</sup>

Despite diffuse implementation and a lack of specificity in reporting, there were some significant implementing actions. Under the National Competition Policy, a major reform, the Competition Principles Agreement, provided that ESD policies should be taken into account in assessing the merits, costs and benefits of proposed reforms.<sup>844</sup> The *Cabinet Handbook* was amended in 1994 to ensure that Cabinet documents concerning issues 'that have the potential to affect ecological processes' addressed ESD implications 'including economic, environmental and social impacts', by reference to the principles of ESD as set out in the Strategy.<sup>845</sup> In essence, the requirement was to have regard to ESD principles. The ESD Roundtable was convened in 1994 and opened by the Prime Minister, although this would be its only meeting, possibly because there were no outcomes of substance.<sup>846</sup>

The second review, after two years, was also discursive.<sup>847</sup> This review followed the structure of the NSESD, but did not include the foreshadowed performance measures, instead simply presenting the information reported by each jurisdiction without measures or aggregation. As a result, while it is possible to see that some specific measures had been progressed, generally it is not possible to assess progress nationally and the report does not attempt any general synthesis. A proposed second stage of the review, intended to focus on 'a few well-targeted areas through which to progress national ESD policy... emphasising areas where an NSESD/ESD approach can give a special focus to linkages across

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<sup>842</sup> Intergovernmental Committee for Ecologically Sustainable Development, *Summary Report on the Implementation of the National Strategy for Ecologically Sustainable Development* (ICESD 1993) <<http://www.environment.gov.au/esd/national/nsesd/summary93/index.html#Overview>>, section 1, (viewed 6 September 2017).

<sup>843</sup> Ibid section 33.

<sup>844</sup> See Council of Australian Governments, 'Competition Principles Agreement — 11 April 1995 (As amended to 13 April 2007)', <<https://www.coag.gov.au/about-coag/agreements/competition-principles-agreement>> (viewed 21 June 2018), cl 1c. The second reading speech to the Competition Policy Reform Bill 1995 said that 'Explicit recognition is given to the broader elements of public interest in the Bill and in the Competition Principles Agreement. The package gives appropriate recognition... to all other policy objectives which governments must balance in making policy decisions, such as ecologically sustainable development...': Commonwealth, *Parliamentary Debates*, House of Representatives, 30 June 1995 2796 (George Gear, Assistant Treasurer).

<sup>845</sup> Australian Government, Cabinet Office, 'Cabinet Handbook' (Australian Government 4<sup>th</sup> ed, 1994) 29–30.

<sup>846</sup> Intergovernmental Committee on Ecologically Sustainable Development, 'Summary Report of National ESD Roundtable', Agenda Paper 5.1, Meeting of 20 July 1994, (Department of the Environment, Sport and Territories file 95/00204). This paper records that all participants reaffirmed their commitment to ESD but that the major item of discussion, greenhouse gas policy, revolved around well-known industry and conservation group positions.

<sup>847</sup> Intergovernmental Committee for Ecologically Sustainable Development, *Summary Report on the Implementation of the National Strategy for Ecologically Sustainable Development (1993–1995)*, above n 563. 220



issues...’,<sup>848</sup> did not occur, and the national coordinating committee, the Intergovernmental Committee on ESD (ICESD), was abolished in 1998. In agreeing to abolish ICESD, ironically on request from environment ministers on the grounds that ICESD was referring environmental matters to COAG without appropriate consultation, the Prime Minister noted that ‘the peak workload associated with the [NSED] has passed.’<sup>849</sup>

### 5.6.2 Informal Review and Fading Away of NSED from 1998

Publicly, the NSED appeared to have faded away by 1998, with the abolition of ICESD. Within government, Minister Hill clearly retained an interest in pursuing ESD. Hill ‘suggested’ to his department that it might do a review of progress on the NSED with a report to COAG.<sup>850</sup> The department undertook the review internally, intending it to be ‘short and sharp’ and to assist Hill’s consideration of ‘options for further action’.<sup>851</sup>

When it provided the review to Hill, the department advised that:

the main lasting impact of the NSED had been through the acceptance of ESD objectives and principles by governments and corporations, and the incorporation of these objectives and principles in legislation, strategies and policies. The NSED has not provided clear and measurable objectives, a lasting blueprint for action, or robust institutions for integrating economic, social and environmental policies ...<sup>852</sup>

In short, the main impact of the strategy had been acceptance of the template for simple policy integration, but without the full institutionalisation needed to ensure this outcome, or the means to measure progress. The department went on to identify three options for further implementation ‘rather than producing another comprehensive national strategy’, even though the risk of this approach was ‘continued shortcomings in overall policy direction and integration’.<sup>853</sup> It recommended the first option, the pursuit of ‘current

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<sup>848</sup> Department of the Environment, Sport and Territories, Minute from Executive Director Environment Strategies Directorate to various staff, ‘The Review of the National Strategy for Ecologically Sustainable Development (NSED)’ 4 July 1996 (Department of the Environment, Sport and Territories, file 96/03641).

<sup>849</sup> John Howard, Prime Minister, letter to Brian Littleproud, Chairman, Australian and New Zealand Environment and Conservation Council, 23 January 1998 (Department of the Environment file 96/2984).

<sup>850</sup> Department of the Environment, First Assistant Secretary Strategic Development Division, ‘Review of Implementation of the National Strategy for Ecologically Sustainable Development’, Brief to Minister 013173, 12 September 2001 (Department of the Environment file 2002/00125).

<sup>851</sup> Department of the Environment and Heritage, Assistant Secretary International and Intergovernmental Branch, ‘Review of the National Strategy for Ecologically Sustainable Development’, Internal Minute, 28 February 2001 (Department of the Environment and Heritage file 2002/00125).

<sup>852</sup> Ibid 3.

<sup>853</sup> Ibid.

priorities for ESD implementation' as opportunities arose, over options for a more formal Commonwealth or Commonwealth/State review, doubting that the resources for such reviews could be justified.<sup>854</sup> This is tantamount to a recommendation not to seek to breathe life back into ESD, as there would be no appetite from government (or governments nationally) for a broader reinvigoration of the NSESD.

Interestingly, Hill marked the departmental recommendation 'not agreed', without directing another approach. Although the Minister was clearly not satisfied, an election followed and Hill was replaced. Discussion of further implementation went no further, although Hill's successor did complete one of Hill's final initiatives, the publication of a version of the internal review. One conclusion of *Are We Sustaining Australia? Report Against Headline Sustainability Indicators*, was that:

None of these [objectives of the NSESD] can be achieved unless the ecological processes on which life depends are protected, and unless the natural resources on which economic and community well-being depend are managed sustainably. We do not have sufficient trend information yet in relation to the ecological and natural resource management indicators, to determine whether or not this is the case.<sup>855</sup>

The foreword to the report stated that this was the first in a series,<sup>856</sup> but there were no subsequent reports and domestically, the NSESD is not referred to as an active measure in official documents after this date. Internationally, Australia's national report to World Summit on Sustainable Development in 2002 quietly acknowledged the fading away of NSESD:

The National Strategy has provided a broad national agenda for sustainable development in Australia. Some of its specific recommendations for the various sectors of the Australian community are no longer relevant, or the objectives of the recommendation having been achieved by other initiatives, but it still provides a nationally agreed checklist of objectives against which outcomes can be compared.<sup>857</sup>

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<sup>854</sup> Ibid 4.

<sup>855</sup> Environment Australia, *Are We Sustaining Australia? A report against headline sustainability indicators*, above n 460, 6. This publication is also discussed in 4.4.3.

<sup>856</sup> Ibid v.

<sup>857</sup> Australian Government, 'World Summit on Sustainable Development — Australian National Assessment Report' [2002], <<https://www.environment.gov.au/node/13078>> (viewed 12 September 2016).

On the other hand, the Strategy, lacking an end-date, remained on the books, allowing the Government to claim the Strategy as its ‘National Sustainable Development Strategy’ as late as 2010 in its national reporting to the UN Commission on Sustainable Development, the UN body charged with monitoring the implementation of Agenda 21.<sup>858</sup> With the abolition of the commission in 2012, the UN body charged with monitoring those commitments, there can be no doubt that the Strategy was completely moribund.<sup>859</sup>

### 5.6.3 Looking Back on the NSESD

The publication of the formal reviews provided further opportunity to evaluate the NSESD. Despite the relatively meagre outcomes identified, two of the ESD Chairs, Harris and Throsby, remained positive, responding to the second implementation review not only in terms of the ‘many tangible policy changes of greater or lesser magnitude’, but also of ‘a more diffuse but no less significant shift in the ethos in which decisions are made in a number of areas of the Federal and State bureaucracy’.<sup>860</sup> While changes in ethos are hard to measure directly, they ought to be apparent in patterns of decision-making. Recall that at Minister Hill’s suggestion the Treasurer had initiated a PC Inquiry into the implementation of ESD by Commonwealth agencies.<sup>861</sup> Although covering the implementation of ESD generally and not the NSESD specifically, the PC’s findings are relevant here, not only because, as the PC recognised, the Strategy was the major Australian ESD policy initiative,<sup>862</sup> but also because of the Strategy’s heavy reliance on agency-based implementation.

The PC concluded that progress on ESD implementation had been ‘variable’, with the best examples in areas where ESD was a core policy concern, or bounded in some way, as with the management of natural resources in the Murray-Darling Basin.<sup>863</sup> In identifying the causes of a broader failure to implement ESD the PC commented that ‘many of the observed shortcomings in the context of ESD implementation can be traced back to failures to follow general good practice policy making’.<sup>864</sup> It went on to make

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<sup>858</sup> Australian Government, ‘2010 NSDS [National Sustainable Development Strategy] Profile: Australia’ <[https://sustainabledevelopment.un.org/dsd\\_aofw\\_ni/ni\\_pdfs/NationalReports/australia/NSDS\\_csd18Australia.pdf](https://sustainabledevelopment.un.org/dsd_aofw_ni/ni_pdfs/NationalReports/australia/NSDS_csd18Australia.pdf)> (viewed 12 June 2018).

<sup>859</sup> United Nations, ‘The Future We Want’, GA Res 66/288, UN GAOR, 66<sup>th</sup> sess, 123<sup>rd</sup> plen mtg, Agenda item 19, UN Doc A/RES/66/288 (11 September 2012) [84].

<sup>860</sup> Harris and Throsby, above n 754, 15.

<sup>861</sup> See 4.4.3.

<sup>862</sup> Productivity Commission, *Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies*, above n 587, XVIII.

<sup>863</sup> Ibid XX.

<sup>864</sup> Ibid XXII.

recommendations in the same vein: for policy integration ('assess likely social, economic and environmental costs and benefits of proposals in both the short and long term'); for policy coordination (including such basics as identifying and consulting stakeholders, as well as more challenging improvements such as improving coordination between Ministerial Councils); and improving the information base (including through routine monitoring).<sup>865</sup> The implication of the PC's findings is that, some seven years after the NSESD was adopted, it had not brought about significant changes to agency decision-making processes, leaving those processes poorly adapted to achieving the policy integration that was fundamental to ESD. Given that the Strategy was, as the PC described it, a 'voluntary code', agencies were not breaking rules.<sup>866</sup> If ESD policies including the NSESD did not lead Commonwealth agencies to operationalise the most basic of the ESD principles, that of policy integration, and indeed if agencies were, more generally, failing to follow general good practice policy making, then any change of ethos following the ESD Process must have been short-lived.

Another positive outcome of the NSESD has been the 'uptake and expression of the ESD principles'.<sup>867</sup> While this may have been a *result* of the NSESD, chapter seven will argue that if the EPBC Act is representative of this uptake, it has been with very limited *outcomes* over time. In terms of outcomes more generally, the Environment Department's informal review cited above found in effect that apart from the uptake of ESD objectives and principles in legislation, strategies and policies, that there were no means of measurement and in fact little to measure. Lothian sought to compensate for this by applying his own rating scale in analysing the two NSESD implementation reports. He evaluated State rather than Commonwealth implementation, but as some of the actions he evaluated were joint national measures his results also give some small indication of Commonwealth performance. Under his rating scale, all of the three states evaluated scored less than 50%, described by Lothian as a 'pass mark'.<sup>868</sup> While Lothian's methodology is somewhat opaque and subjective, it certainly suggests poor performance, not only by the three States in his evaluation.

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<sup>865</sup> Ibid, XXV–XXXII, especially findings 6.1–6.3, 7.1; and recommendations 6.1, 7.1, 7.4.

<sup>866</sup> Ibid 28.

<sup>867</sup> Dovers, 'Discrete, Consultative Policy Processes: Lessons from the National Conservation Strategy and National Strategy for Ecologically Sustainable Development' above n 804, 143–4.

<sup>868</sup> See Lothian, above n 760 53.

In its environmental performance review of Australia in 1997, the OECD described the NSESD as representing significant progress in policy integration.<sup>869</sup> As the OECD does not support its conclusion with analysis, it can have little weight. Several academic reviews that followed shortly thereafter reached similar conclusions to those that would follow in Environment Department's internal review, although on the basis of brief general analysis. Bührs' and Aplin's evaluation was undertaken in the context of describing Australia's approach to sustainability more broadly and locating that approach internationally in terms of its policy style, but they point to poor policy quality and indeterminate outcomes:

The Strategy's limitations inevitably show up in its implementation. Although many initiatives and development are claimed to have stemmed from it ... these are mostly in the nature of policies, programmes or strategies, and do not provide many clues as to the extent to which objectives have been achieved and problems mitigated ... Given the relative lack of specific objectives, targets, time-frames and indicators, evaluating progress has been difficult ...<sup>870</sup>

Picton and Daniels, casting their net much more widely than the NSESD, would simply conclude that Australia, unlike some other high-income nations, did not appear to be experiencing 'substantive ecological restructuring in the latter part of the 20<sup>th</sup> century'.<sup>871</sup>

### *Evaluation by Comparison*

Several scholars have evaluated the NSESD by comparing it with other national strategies. Dovers argues that the NSESD compared poorly with the theoretically comparable National Competition Policy (NCP), contrasting findings by the State of the Environment Advisory Council that the NSESD was having little impact (see below) with the 'profound' impact of the NCP, which was being implemented with 'vigour and relish'.<sup>872</sup> In a similar vein, Curran and Hollander emphasise the importance of the 'political and financial muscle' of the NCP in its success, involving, in contrast to the NSESD, an independent review body and significant payments to states, contingent on implementing the

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<sup>869</sup> OECD, *Environmental Performance Reviews: Australia* (1998), above n 577, 146.

<sup>870</sup> Bührs and Aplin, 'Pathways Towards Sustainability: The Australian Approach', above n 834, 324. They identify the NSESD as 'green planning (rational policy)', as distinct from two other broad classes of approach, institutional reform and social mobilisation (at 317).

<sup>871</sup> T Picton and P L Daniels, 'Ecological restructuring for sustainable development: evidence from the Australian economy', (1999) 29 *Ecological Economics* 405, 419.

<sup>872</sup> Stephen Dovers, 'Institutionalising ESD: What happened, what did not, why and what could have?' in Clive Hamilton and David Throsby (eds), *The ESD Process: Evaluating a Policy Experiment* (Academy of the Social Sciences in Australia, 1998) 29–30.

agreement.<sup>873</sup> Also using a comparative approach but applying different criteria, Pittock, Hussey and Dovers compare the relative failure of the NSESD with the relative success of both the NCP and the National Water Initiative, rating the latter two initiatives significantly higher than the NSESD against four characteristics of effective adaptive capacity and resilience: clarity of purpose; diversity of approaches; resources and stakeholders; connectivity of institutions and processes; and integration and feedback.<sup>874</sup> Compared to the more successful strategies, the NSESD lacked: clarity of purpose; funding; strong champions in government and an independent regulator outside of government; and a focus on legislative reform to provide opportunities for public accountability and transparency.<sup>875</sup>

### *Over Time, Little Impact*

With hindsight, it is not surprising that the NSESD did not have a significant impact. Impact would require that ecological constraints be given effect through norms and institutions and the NSESD did not establish any. Although action was voluntary, governments might have chosen to change behaviours or offered incentives to change, but did little. Rather, governments revealed their attitude to the Strategy as soon as it was complete. The Commonwealth's 1992 Environment Statement followed on almost immediately but made no mention of the NSESD and barely mentioned ESD. The statement marked an immediate return to business as usual. More generally, as Hollander has pointed out, governments showed their hand through COAG, the body with ultimate oversight of the Strategy. The NSESD had been the third agenda item at the very first COAG meeting in 1992, but thereafter 'almost disappeared from the COAG lexicon.'<sup>876</sup> It was as if governments had dealt with an unwanted legacy of the Hawke era and simply wished to move on.

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<sup>873</sup> Giorel Curran and Robyn Hollander, 'Changing Policy Mindsets: ESD and NCP Compared' in (2002) 9 *Australian Journal of Environmental Management* 158, especially at 164–166. See also Stephen Dovers, 'Institutions for Sustainability', *Tela Papers* (Australian Conservation Foundation, 2001), available at <<https://openresearch-repository.anu.edu.au/bitstream/1885/40972/3/een0101.pdf>> (viewed on 11 September 2017).

<sup>874</sup> Jamie Pittock, Karen Hussey and Stephen Dovers, 'Ecologically sustainable development in broader retrospect and prospect: evaluating national framework policies against climate adaptation imperatives', (2015) 22:1 *Australasian Journal of Environmental Management* 62, 71–74, applying four criteria developed by Cork et al: see S Cork, R Price and D Connell, *Capacity to adaptively manage under climate variability* (Murray-Darling Basin Authority, Canberra, 2011).

<sup>875</sup> Ibid 74.

<sup>876</sup> Robyn Hollander, 'ESD, federalism and intergovernmental relations in Australia', above n 371, 26.

## 5.7 Why Was the NSESD a Policy Failure?

The story of the NSESD is one of clear policy failure. Some of the causes of failure are obvious, particularly the change of political priorities and approach that accompanied a change of Prime Minister. The policy-related causes of interest here can be summarised as a precipitate decision to pursue a highly ambitious goal, ESD, while remaining ambivalent or uncertain about its implications and without adopting an implementation process commensurate with the goal.

### 5.7.1 Failure to Consider Implications and to Adopt Implementation Process Commensurate with Goal

The attenuated policy development process for the 1989 Statement was discussed in 3.3.2. The result of that attenuation was that the Government committed itself to ESD without a full understanding of what that concept meant or what it implied for policy. There was no implementation plan, only a basic reporting system. In the absence of an implementation plan there had been no consideration of the processes and institutions that needed to be put in place. While the Government had announced some additional funding for specific measures in the 1989 Statement, there was none for developing or implementing ESD itself.<sup>877</sup> The Government's failure to lay foundations to implement the 1989 Statement created a policy vacuum and made ESD vulnerable to failure by neglect or displacement by supervening events. In this instance Ministers Kerin and Cook were able to execute something of a policy ambush, seizing the policy initiative and reframing the implementation task in terms more amenable to their industry stakeholders and much less well-adapted to implementing ESD, because it fragmented the underlying environmental issues such as biodiversity loss in favour of an approach that would privilege the status quo.<sup>878</sup>

Another development made possible by the absence of an implementation path for ESD was an abrupt change of direction to a 'bottom-up approach' to implementation. A consensus-based dialogue may have been appropriate if the Government had already laid

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<sup>877</sup> Australian Government, 'Environmental Initiatives' *Cabinet Memorandum* 6533, 15 June 1989; decision recorded in *Cabinet Minute* 12754, 15 June 1989 (NAA 14039 6533).

<sup>878</sup> See Hamilton, 'Ecologically Sustainable Development: Implications for Governance in Australia', above n 433, 66; see also Ian Wills, 'The Ecologically Sustainable Development Process: An Interim Assessment' (Spring) *Policy* 8; Hare and WWF, 'Ecologically Sustainable Development: Assessment of the ESD Working Group Reports' above n 761, 4–5.

the groundwork for implementation by clearly defining the goal and principles of ESD and identifying the parameters of implementation. Discussion might then have been about how the Government's policy framework could be implemented with minimum impact and maximum support. Instead a bottom-up approach left it vulnerable to stakeholders proposing approaches that government might find inadequate or unacceptable, or wielding an effective veto over major elements of policy. As it transpired, consensus triumphed but governments found major elements of the subject of that consensus unacceptable.

An implication of the adoption of a corporatist and time-constrained ESD Process was that it privileged industry, environment groups and unions at the expense of the broader and long-term public engagement that was surely called for by the adopting of a goal as ambitious and fundamental as ESD. Although civil-society groups in the ESD Process could argue to a greater or lesser degree that they represented critical sectors of society, even society generally, full implementation of ESD would have whole-of-society implications and many in society would not accept that they were represented by one or more of these groups. Further, although the government undertook public consultation at several points, as did the working groups, these processes were always time constrained. Overall, public engagement was limited. This, together with the implications of executive federalism, under which the NSESD was finalised away from public scrutiny,<sup>879</sup> meant the public did not have any real ownership of either the Strategy or ESD more broadly. The Strategy itself was also hidden, possibly deliberately, by the release of the policy-conventional 1993 Environment Statement. More generally, ESD effectively disappeared from public view, into the myriad of existing policy processes and initiatives that governments now said would now address aspects of the strategy; into technical processes as it was incorporated into legislative and policy instruments; and into general sustainability discourse, in which sustainability tended to be all things to all people.

Presaging this point, in their Intersectoral Issues Report the Chairs had talked of the need to go beyond economics to a change of values:

While accepting the strengths of an economic framework ... We also have to accept the market's limitations. These include the implications of the major spillover effects of market operations. In particular, they imply a need to recognise that the world is a closed economic system in which the

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<sup>879</sup> Hamilton has pointed out that ministerial councils are removed from constituents and removed from representative government: Hamilton, above n 433, 72.



economy and the environment are related in a circular way, with flows going from the environment to the economy as well as from the economy to the environment.

...

... Implementing ESD will not be achieved simply by changing a set of decision rules, even were that feasible. Clearly the political, technical and philosophical issues that the concept involves need to be clarified. Achieving ESD, however also requires an acceptance that economic decisions ultimately need to be justified against some criterion of sustainability ... This will often involve value judgements ... and ... Calls for fundamental changes in values and attitudes.<sup>880</sup>

Fundamental changes in values and attitudes would require a whole-of-society engagement, most likely over an extended period. The Government had taken almost the opposite view, implying that the task was primarily technical or administrative. From the outset, every time the ESD Process was considered by Cabinet the relevant cabinet document was a memorandum from officials rather than a submission from ministers. Ministers take submissions to Cabinet recommending a course of action, whereas memoranda are concerned with lesser matters, usually containing 'supplementary information' or provide options at Cabinet request.<sup>881</sup> Further, the working groups were dominated by officials. In the Agriculture Working Group for example, seven of 12 members (excluding the Chair) were from government agencies of various kinds, while only five represented interests directly affected.<sup>882</sup>

### 5.7.2 Ambivalence About the Goal

The consequences of embarking on a consensus-based stakeholder dialogue before policy parameters were finalised were due in large measure to the high degree of ambivalence in government, which had yet to realise fully that ESD would require ecological constraints, let alone determine the nature of those constraints and was clinging to the possibility that ESD would require marginal rather than paradigmatic change. This ambivalence was manifest initially in the ESD Discussion Paper (identified in Hawke's charter letter as a continuing source of guidance) and then in the charter letter itself. On the one hand, the government had articulated a policy goal corresponding to SS in both documents. It is clear from the later formulation of principles by the Chairs that the working groups understood this and were aware of the difference between SS and WS; they were thus also aware that

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<sup>880</sup> *ESD Intersectoral Issues Report*, above n 703, 6–7.

<sup>881</sup> Australian Government, *Cabinet Handbook* (AGPS 1988) 22; see also Althaus, Bridgeman and Davis, *The Australian Policy Handbook* (Allen & Unwin, 4<sup>th</sup> ed, 2007) 151.

<sup>882</sup> Two of these were from industry, two from environment groups and one from unions: see *ESD Agriculture Report*, above n 703, v–vi.

the goal brought with it difficult biophysical objectives of maintaining ecological function and biodiversity. Yet on the other hand the letter showed a strong preference for a standard policy incrementalism with its direction to work within the parameters of existing policies and programs, general budget constraints and consensus.

The task set by government was asking the working groups to solve a wicked policy problem without rocking the political boat. This does not necessarily mean that the Government was fully aware of the contradictions in its approach, at a point where the implications of sustainability were still being explored. Yet simple logic alone would be enough to reveal that the maintenance of ecological systems and processes, one of the 'fundamental goals' listed in the charter letter, may well require the identification of, and compliance with, ecological constraints on the consumption of ecosystem services. This in turn would almost certainly require significant changes to policy and significant institutionalisation with associated budget costs. Although such costs might have been mitigated by offsetting savings, the charter letter was also discouraging of gains in one sector at the expense of another, with the implication that a restructuring of the economy was not on the table. Further, the direction to pursue consensus among representatives of vested interests made it unlikely that the working groups would recommend structural economic change.

### **5.7.3 Under-Estimating the Centrality of the States and an Inappropriate 'Corporatist Federalism'**

A particular implication of the lack of policy groundwork in 1989 and the change of direction to adopt the ESD Process is that little thought had been given to the role of the States. This failure carried over into the Cabinet memorandum proposing what became the ESD Process. The memorandum gave only limited consideration to the States, referring to the need to consult 'state government organisations' among other stakeholders, as distinct from engaging the governments fully as potential partners.<sup>883</sup> This is most surprising, given that the importance of the States was acknowledged at the time:

The strategy will need to accommodate ... existing programs within ... State ... spheres, and the real limits of what the Commonwealth can achieve.<sup>884</sup>

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<sup>883</sup> *Cabinet Memorandum 6899*, above n 330, 5.

<sup>884</sup> *Ibid* 3.

Despite this acknowledgement, the Commonwealth did not seek full partnership with the States. Rather, the Prime Minister wrote to Premiers seeking state ‘involvement in the exercise’ and their ‘advice’; replies received to June 1990 were ‘supportive of the concept of sustainable development’ and most included ‘material on each state’s work in relation to [SD] strategies’.<sup>885</sup> The Commonwealth then decided to limit state representation to two officials in each working group in total, with these officials being nominees of ministerial councils rather than representatives of their governments.<sup>886</sup> This ‘corporatist federalism’, would have allowed state officials to take a position of ‘all care, no responsibility’. As a result, State governments to stand back and keep a watching brief, with the option of intervening at a later point, either to share in any success or to adopt a spoiler role if their interests were threatened.

Another consequence arising from the decision to designate state officials as representatives of Ministerial Councils was that it set the precedent for assigning executive implementation roles to these non-executive bodies. Officials would later recommend a significant ongoing role for the councils, this time to take a significant role in implementation, if necessary through the very complex mechanism of ‘joint Ministerial Council working groups’.<sup>887</sup> This was wrong in principle, as there was no ‘sector’ consisting of the set of Commonwealth and State governments for councils to represent, nor on a practical level were ministerial councils designed or resourced for executive roles.

Moreover, as implemented, this ‘corporatist federalism’ was inappropriately weighted. In the Agriculture Working Group for example, four officials were from Commonwealth agencies while two state officials represented State agricultural interests and one represented State environmental interests.<sup>888</sup> It should have been apparent at the time that it was highly unlikely that States, responsible for most on-ground agricultural and environmental matters, would accept and implement outcomes from a Commonwealth-led process in which State representatives collectively were outnumbered by Commonwealth

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<sup>885</sup> *Cabinet Memorandum 7136*, above n 337, 2.

<sup>886</sup> Ibid 5. The exception was the Working Group on Energy Production, where all states were invited to participate, for unstated reasons (Attachment C to *Cabinet Memorandum 7136*).

<sup>887</sup> Working Group on Environmental Policy, ‘Ecologically Sustainable Development: Report to the Special Premiers’ Conference’, Attachment to Australian Government, ‘Special Premiers’ Conference November 1991: Report on Ecologically Sustainable Development Process’, *Cabinet Memorandum 8416*, 6 November 1991 (NAA 14039, 8416). Admittedly the proposal to use ministerial councils was on the basis that there would be some enhancements to assist coordination. Note that the Special Premiers’ Conference was cancelled, and thus the paper not considered, because of a disagreement between the Commonwealth and States on another issue.

<sup>888</sup> See *ESD Agriculture Report*, above n 703, v–vi.

officials and most States individually were not represented. It should also have been clear that the likelihood of States accepting outcomes was further decreased by the fact that, among the state officials who were present, none came from the central agencies whose views would be critical in any subsequent whole-of-government decision-making.

### 5.7.5 Weak Institutionalisation in Implementation

The problem of weak institutionalisation emerged as a particular failure of the NSESD in implementation. Even though it is apparent that governments did not intend to bind themselves or change behaviour directly through the Strategy, leading the Productivity Commission to describe it as voluntary, governments might still have given some strength to institutional arrangements to encourage or cajole various parties to implement the Strategy. However, governments rejected institutional recommendations from the ESD working groups, including to establish Offices of ESD in first ministers' departments.<sup>889</sup> They acted extensively to incorporate ESD principles into legislation,<sup>890</sup> but chapter seven will argue, using the Commonwealth's major environmental law as a case study, that this was done in an ineffectual manner.

In the absence of Offices of ESD, ministerial councils were assigned a significant implementation role, but suffered from major weaknesses as coordinators of policy implementation. To the reasons already discussed might be added that ministerial councils are bound to unanimity, and meet infrequently.<sup>891</sup> They are not accountable as entities: individual ministerial members are accountable to their own Parliaments allowing even the Commonwealth to claim that it is only one of nine jurisdictions and that its usual leadership role is not coercive. The ministerial councils in turn needed to be coordinated by a committee of central agency officials.<sup>892</sup> This bureaucratic layering was a recipe for inaction.

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<sup>889</sup> Stephen Dovers, 'Institutionalising ESD: What happened, what did not, why and what could have been?', above n 872, 27. Dovers points to two institutional successes connected to the ESD process, the National Environment Protection Council (NEPC) and SoE reporting, but these were indirect products as they arose from separate, though related, initiatives. See also Bührs and Aplin, above n 834, 326–328.

<sup>890</sup> See the many examples listed in Stein and Mahony, 'Incorporating Sustainability Principles in Legislation', above n 84.

<sup>891</sup> Hamilton, above n 433, 72.

<sup>892</sup> For the NSESD, this was the ESD Steering Committee; this was later rolled into the Intergovernmental Committee on Ecologically Sustainable Development (ICESD); see Robert Fowler, 'New National Directions in Environmental Protection and Conservation' in Ben Boer, Robert Fowler and Neil Gunningham (eds), *Environmental Outlook: Law and Policy* (Federation Press 1994), 113, 141; Bührs and Aplin, above n 834, 328; Howes et al, 'Environmental Sustainability: A Case of Policy Implementation Failure?', above n 35.

Dovers has contrasted sustainability policy with economic policy, arguing that an under-institutionalised ESD policy lacked the ecological equivalents of a statistics bureau and national accounts (ie formally arranged and independently produced information) and a Productivity Commission (ie an independent policy and review body); and that ESD policies could be outweighed by well-institutionalised economic and social policies, just as a large player could overwhelm a small player on the 'level playing field'.<sup>893</sup> This also meant that ESD policy lacked such institutional benefits as longevity to experiment, learn and adapt; a statutory base for providing transparency and accountability; and a degree of independence from day-to-day political pressures.<sup>894</sup> Much later, after the abolition of the coordinating committees in 1998, the Productivity Commission would identify lack of institutionalisation as a problem and recommend that an existing body assume an advice and coordinating role.<sup>895</sup> In short, the NSESD placed no obligations on any actor and contained no mechanism to encourage or cajole compliance. In the absence of any direct sanctions for non-compliance, indirect sanctions such as social opprobrium were also unlikely given the low profile given the NSESD by governments and its low-key coordination through mechanisms of executive federalism.

### 5.7.6 Conclusions

The NSESD failed because governments decided precipitately to pursue an ESD strategy while still uncertain about the implications of ESD and still ambivalent about their actual level of policy ambition. While the precipitate nature of the decision was driven by political factors, the policy consequence was that the Prime Minister and the Cabinet, having only recently settled on an ESD policy which itself was underdeveloped and at risk of failure, allowed an abrupt change of direction to a 'bottom-up' consensus-based approach without being in a position to ensure that the resulting strategy was well-adapted to serving as the means to implementing the policy goal. The listing of ESD principles in Hawke's charter letter suggests that government had insight at a technical level into what ESD required. However, official documents to this point did not indicate that Government understood all the *implications* of ESD, that achieving the goal of ecological sustainability would require ecological constraints on the economy to maintain ecological function and also that government was ambivalent as to its policy aspirations, simultaneously canvassing both the

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<sup>893</sup> Dovers, 'Institutionalising ESD: what happened, what did not, why and what could have been?' above n 872, 29.

<sup>894</sup> Ibid 33.

<sup>895</sup> Productivity Commission, *Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies*, above n 587, XXXV (recommendation 9.1).

ambitious policy of ecological sustainability (Policy Tier 5.3) and the incremental approach of weak policy integration (Policy Tier 2). Without understanding the implications and resolving its own policy ambivalence, government was not yet well-placed to continue on its existing path to develop its own 'top-down' approach to implementation, let alone take the risks inherent in a 'bottom-up' process, either that stakeholders would recommend an implementation path that was not well-adapted to the goal, or, worse, that the process would fail due to stakeholder actions.

The recommendations of the ESD process were surprisingly coherent, if pitched at the lower level of the government's uncertain range of policy ambition. In principle, despite its mistakes to this point, government might have salvaged the situation by confirming a level of policy ambition consistent with the recommendations, or adopting a higher level of ambition while using the approach recommended by the Working Groups as a foundation for further policy development. This scenario did not eventuate for a number of reasons, most of them political, but the non-political factor of interest here is that the Government had, in its hasty initial decision and in subsequent deliberations, ignored or underestimated the centrality of the states to implementing ESD. While this might be seen as a failure more relevant to federalism rather than ESD, it was also the latter because it meant that vitally important stakeholders were not engaged appropriately from the outset, with far-reaching consequences. In the same vein, failing to recognise the importance of the public to ESD was a major failing. The desultory nature of public consultation did not make a great difference in the short term, as the strategy was finalised without major demonstrations of public concern. This failure had significant consequences in the longer term however as, with the policy opportunity created in part by the strong public support in that era having closed, the legacy of the NSESD would make it that much harder for a future government to create a similar opportunity.

## CHAPTER SIX

### THE NATIONAL BIODIVERSITY STRATEGY AND ECOLOGICALLY SUSTAINABLE DEVELOPMENT

*One of the great mistakes is to judge policies and programs by their intentions rather than their results.*  
Milton Friedman<sup>896</sup>

#### 6.1 Introduction and Overview

The purpose of this chapter is to consider whether Australia's national biodiversity strategies, the National Strategy for the Conservation of Australia's Biological Diversity ('1996 Strategy') and Australia's Biodiversity Conservation Strategy 2010–2030 ('2010 Strategy') but now including the draft Australia's Strategy for Nature 2018–2030 ('Draft 2018 Strategy') were coherent means of advancing the goal ESD in Australia.<sup>897</sup> (The term 'Biodiversity Strategy' is used to refer to the strategies generally.) The 1996 Strategy had two objectives, to implement the Biodiversity Convention and also to implement the NSESD. Under the 2010 Strategy, the objective of implementing Australia's commitments under the Biodiversity Convention was retained but references to ESD were replaced by more general references to the value of biodiversity, both inherent and functional.<sup>898</sup> Despite the removal of the direct reference to implementing ESD, the 2010 Strategy remained central to advancing ESD, not only because maintaining biodiversity is central to ecological sustainability, but because the sustainable use of biodiversity is one of the three objectives of Biodiversity Convention.<sup>899</sup> Although the language of the Draft 2018 Strategy varies significantly from earlier strategies, several elements, the basic rationale of the

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<sup>896</sup> Interview with Richard Heffner, *The Open Mind*, PBS Television network, December 1975.

<sup>897</sup> Council of Australian Governments, 'The National Strategy for the Conservation of Australia's Biological Diversity' (COAG 1996) ('1996 Strategy'); Natural Resource Management Ministerial Council, 'Australia's Biodiversity Conservation Strategy 2010–2030' (NRMMC 2010) ('2010 Strategy'); Biodiversity Working Group, 'Australia's Strategy for Nature 2018–2030: Australia's Biodiversity Conservation Strategy and Action Inventory' (Department of Environment and Energy 2017) ('Draft 2018 Strategy').

<sup>898</sup> The 2010 Strategy, above n 897, 7, 31, 68.

<sup>899</sup> See *Biodiversity Convention*, above n 111.

inherent and functional value of nature, and the need to meet international obligations, remain.<sup>900</sup>

### *Approach and Scope*

The chapter seeks to assess the coherence and credibility of the Biodiversity Strategy as a strategy, not to undertake a full evaluation. Mulgan has defined public strategy as ‘the systematic use of public resources and powers, by public agencies, to achieve public goals’,<sup>901</sup> while Grant has identified the common factors of a successful strategy as:

1. *Goals that are simple, consistent and long term ...*
2. *Profound understanding of the competitive environment ...*
3. *Objective appraisal of resources ...* effective in exploiting internal strengths while protecting areas of weakness
4. *Effective implementation ...* [involving] effective marshalling of resources and capabilities and quick responses to changes ...<sup>902</sup>.

The reference in the second factor to the ‘competitive’ environment need not be read narrowly as referring to commercial competition but can be taken here as referring to policy context. Applying these factors specifically to *public* strategy designed to implement *policy* goals, the Biodiversity Strategy will be coherent first, if its goal is clearly defined and supported by actions that are consistent with advancing the goal individually and achieving it collectively; and second, if those actions are in their policy context, feasible of achievement through the allocation of resources and other means of implementation. (Actual achievement of outcomes is not critical to coherence, as achievement can be contingent on operational factors that are beyond scope here, such as management skills).

Because the Biodiversity Strategy is an overarching or ‘umbrella’ strategy, which calls up all other biodiversity initiatives,<sup>903</sup> it is not necessary here to consider specific national initiatives that sit under that umbrella, including the National Framework for the

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<sup>900</sup> See *Draft 2018 Strategy* 4–7.

<sup>901</sup> Geoff Mulgan, *The Art of Public Strategy: Mobilizing Power and Knowledge for the Common Good* (Oxford University Press, 2009) 1.

<sup>902</sup> Robert M Grant, *Contemporary Strategy Analysis: Text and Cases* (Wiley, 7<sup>th</sup> ed, 2010) 9–11 (original emphasis).

<sup>903</sup> The 2009 strategy states explicitly that it functions as a policy umbrella for such national frameworks: see *Australia's Biodiversity Conservation Strategy 2010–2030*, 9.



Management and Monitoring of Australia's Native Vegetation<sup>904</sup> and Australia's Strategy for the National Reserve System 2009–2030,<sup>905</sup> despite the significance of these measures in their own right.

The task of preparing a coherent and credible national biodiversity strategy in Australia is especially complex because of the divided roles and responsibilities in a federal system. The Biodiversity Strategy was subject to many of the same federal issues as were discussed in chapter five in relation to the NSESD: the literature discussed there is also relevant here.

## 6.2 Literature Relevant to Biodiversity Strategy

This section considers the small literature specific to the Biodiversity Strategy. Because this chapter does not go to the merits of specific measures in the strategy, it is not necessary to consider the literature on conservation planning and management in detail.<sup>906</sup> A brief discussion is useful however because it highlights the importance of a number of the general approaches that display a high degree of congruence with the general public policy literature on public strategy.

### *Literature on the Biodiversity Strategy*

The Biodiversity Strategy itself has attracted little academic analysis. The only article specifically on the strategy in a peer-reviewed journal is not in itself an academic analysis but a 'letter of concern' commenting on the draft 2010 Strategy.<sup>907</sup> While overtaken by the finalising of the 2010 Strategy, the salient point here is that although the authors were scientists, two of the key points they raised were general policy concerns, the absence of clear and accountable targets including specific timeframes, and the failure to recognise and address failures of implementation under the existing strategy.<sup>908</sup> There is also a small

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<sup>904</sup> Natural Resource Management Ministerial Council, 'National Framework for the Management and Monitoring of Australia's Native Vegetation' (NRMMC 1999).

<sup>905</sup> Natural Resource Management Ministerial Council, 'Australia's Strategy for the National Reserve System 2009–2030' (NRMMC 2009).

<sup>906</sup> See for example Emma J McIntosh, et al, 'The Impact of Systematic Conservation Planning' (2017) 42(1) *Annual Review of Environment and Resources* 677; see also C Margules and S Sarkar, *Systematic Conservation Planning* (Cambridge University Press 2007); James Watson, Richard A Fuller and Lissa Barr, 'Why are we still using a "one size fits all" philosophy for systematic reserve planning in Australia?' (2008) 14 *Pacific Conservation Biology* 233.

<sup>907</sup> See Angela H Arthington and Jon Nevill, 'Australia's Biodiversity Conservation Strategy 2010–2020: Scientists' letter of concern' (2009) 10 *Ecological Management & Restoration* 78.

<sup>908</sup> Ibid 81.

international literature on biodiversity strategies, but it is of little relevance here as it is either specific to particular jurisdictions, concerned with implementation of the Biodiversity Convention generally, or comparative, dealing briefly with Australia among many countries.<sup>909</sup>

*Congruence of Aspects of the Conservation Planning and Management and Public Policy Literatures*

Usefully, Lindenmayer et al have considered much of the literature relevant here in a synthesis article. They argue that much of the biodiversity conservation literature is specific to particular cases, species or landscapes and that, because all ecological systems are unique, it is not possible to provide general management prescriptions.<sup>910</sup> However, the authors do identify 13 important issues, across themes of goal-setting, spatial and temporal issues, and management approaches. For example, they identify the importance of managing landscapes holistically: 'manage the entire mosaic, not just the pieces'.<sup>911</sup>

The article also draws some general implications from the significant levels of uncertainty associated with landscape management, due to 'contingency, lack of knowledge of biotic responses and complex system dynamics'.<sup>912</sup> These implications include: avoiding standardised approaches to limit the risk of making the same mistake everywhere; utilising a variety of management options and treating them as adaptive-management experiments; acting at multiple management scales because species and ecological processes operate at multiple ecological scales; and applying specific (scientific) principles contingent upon 'context, conditions, species assemblages, processes and other factors'.<sup>913</sup> This application will be most useful when 'coupled with a deep knowledge and understanding of a given landscape'.<sup>914</sup> In this regard, while the lack of data and the poor state of environmental information systems generally has been discussed in chapter five, a series of studies

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<sup>909</sup> Examples of jurisdiction-specific articles are Simo Sarkki et al, 'Are national biodiversity strategies and action plans appropriate for building responsibilities for mainstreaming biodiversity across policy sectors? The case of Finland' (2016) 29 *Journal of Environmental Planning and Management* 1377; and B Coffey and G Westcott, 'New directions in biodiversity policy and governance? A critique of Victoria's Land and Biodiversity White Paper' (2010) 17 *Australasian Journal of Environmental Management* 204. On the Biodiversity Convention, see Alvin Chandra and Anastasiya Idrisova, 'Convention on Biological Diversity: a review of national challenges and opportunities for implementation' (2011) 20 *Biodiversity Conservation* 3295; while on the country approaches generally, see Christian Prip, Tony Gross, Sam Johnston and Marjan Vierros, *Biodiversity Planning: An Assessment of National Biodiversity Strategies and Action Plans* (United Nations University 2010).

<sup>910</sup> David Lindenmayer et al, 'A checklist for ecological management of landscapes for conservation', (2008)

11 *Ecology Letters*, 78.

<sup>911</sup> Ibid 86.

<sup>912</sup> Ibid 88.

<sup>913</sup> Ibid.

<sup>914</sup> Ibid.

undertaken by Lefroy et al illustrates the impact of this on conservation planning in Australia. The aim of the studies was to identify whether it was possible (on the basis of Australian research projects) to detect the influence of public environmental programs on the condition of natural resources.<sup>915</sup> They found it difficult to detect that influence, concluding that in many cases it was the lack of data at sufficient spatial and temporal scale that prevented exploration of unambiguous causal relationships.<sup>916</sup>

Another major strand of the literature is the need to prioritise conservation actions.<sup>917</sup> Wilson et al identify nine approaches used to identify priority locations for conservation, while Brooks et al identify nine templates of global priorities developed by conservation organisations.<sup>918</sup> Without needing to enumerate the approaches, the central point is that while these studies both prioritise highly vulnerable regions of high irreplaceability (eg montane systems, tropical islands), there is a major fault-line between reactive approaches, which generally prioritise conservation of areas of high vulnerability, and proactive approaches, which generally prioritise conservation of areas of low vulnerability. Other generally relevant biodiversity conservation literature deals with specific policy standards, such as the 'comprehensive, adequate and representative' or 'CAR' standard developed in Australia for ecologically viable protected areas; or compares the relative benefits of policy instruments, such as those of reserve systems compared to schemes based on payments for ecosystem services.<sup>919</sup>

Lindenmayer's and Gibbons' work on biodiversity monitoring emphasises the importance of well-designed monitoring programs to designing more effective management interventions, along with the importance of institutionalisation for effectiveness over time.<sup>920</sup> Similarly, Ferraro and Pattanayak, prompted by the finding of the *Millennium Ecosystem Assessment* that there are few well-designed empirical analyses of biodiversity

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<sup>915</sup> Ted Lefroy et al, 'Integrating science for landscape management' in EC Lefroy and Commonwealth Scientific and Industrial Research Organisation (eds), *Landscape Logic* (CSIRO Publishing, 2012) 21.

<sup>916</sup> Ibid.

<sup>917</sup> See for example H P Possingham et al, 'Making Smart Conservation Decisions' in G Orians and M Soulé (eds) *Research Priorities for Conservation Biology* (Island Press 2001) 225.

<sup>918</sup> Kerrie A Wilson, Josie Carwardine and Hugh P Possingham, 'Setting Conservation Priorities', (2009) 1162 *Annals of the New York Academy of Science* (The Year in Ecology and Conservation Biology) 237, see especially Table 2; T M Brooks et al, 'Global Biodiversity Conservation Priorities', (2006) 313 *Science* 58.

<sup>919</sup> See for example James A Fitzsimons and Hugh A Robertson, 'Freshwater Reserves in Australia: Directions and Challenges for the Development of a Comprehensive, Adequate and Representative System of Protected Areas' (2005) 552 *Hydrobiologia* 87; Watson, Fuller and Barr, above n 906; see also Daniela A Miteva, Subhrendu K Pattanayak and Paul J Ferraro, 'Evaluation of biodiversity policy instruments: what works and what doesn't?' (2012) 28 *Oxford Review of Economic Policy* 69.

<sup>920</sup> David Lindenmayer and Philip Gibbons, *Biodiversity Monitoring in Australia* (CSIRO Publishing 2012) 1, 219–220; see also Lindenmayer et al, 'Improving biodiversity monitoring' (2012) 37 *Austral Ecology* 285, 287.

conservation measures, apply general principles of evaluation to argue the need for much greater attention to evaluating biodiversity conservation investments.<sup>921</sup>

Overall, this literature emphasises themes of setting clear goals and adopting wholistic and integrated approaches, while tailoring approaches to ecological context. The literature also supports prioritisation based on cost effectiveness, the 'spreading' of management actions to reduce risk, and adaptive management.<sup>922</sup> In their synthesis article, Lindenmayer et al argue that '[c]lear objectives need to be derived from a broad vision of what people want from landscapes in the future', pointing out that this is something which both ecologists and resource managers have often failed to do.<sup>923</sup> They go on to argue that clear objectives derived from a broad vision of what people want from landscapes are required as a basis for choosing between, for example, the management actions required to maintain ecological processes and the different actions required to maintain ecosystem services.<sup>924</sup> Although developed in a different context, these general principles of conservation planning show a high degree of congruence with the general public policy and management literature: both emphasise the importance of setting clear policy objectives on the basis of good information, and of adopting well-adapted means to the desired end that are amenable to adaptive-management approaches.<sup>925</sup> Likely reasons for this congruence are first, that both literatures rest on the underlying 'applied problem solving' paradigm, discussed in 1.2 above; and second that both adaptive management and the standard policy cycle reflect the rationality of iteration when what is being attempted involves complexity, uncertainty and significant effluxion of time. The implication for the Biodiversity Strategy is that although biodiversity is a complex and specialised topic, at the high level under consideration here, general considerations of public policy and strategy can be applied in the normal way.

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<sup>921</sup> Paul J Ferraro and Subhrendu K Pattanayak, 'Money for Nothing? A Call for Empirical Evaluation of Biodiversity Conservation Investments' (2006) 4 *PLOS Biology* 0482.

<sup>922</sup> *A Dictionary of Environment and Conservation* (Chris C Park and Michael Allaby, *A Dictionary of Environment and Conservation* (Oxford University Press, 2<sup>nd</sup> ed, 2013)) defines adaptive management as: 'An approach to the management of natural resources that is based on learning by doing, and on making decisions as part of an on-going process of monitoring, review, and adaptation.'

<sup>923</sup> Lindenmayer et al, above n 910, 85. The authors cite R Peters, *A Critique for Ecology* (Cambridge University Press, 1991) in support of this argument. Wilson et al make a similar point in relation to prioritisation, that '[w]ithout a clear definition of goals, as well as the identification of actions and their costs and likely benefits, decisions are unlikely to be cost-effective, and outcomes cannot be evaluated': see Kerrie A Wilson, Josie Carwardine and Hugh P Possingham, 'Setting Conservation Priorities', (2009) 1162 *Annals of the New York Academy of Science* (The Year in Ecology and Conservation Biology) 237.

<sup>924</sup> Ibid. Wilson et al make a similar point: see Kerrie A Wilson, Marissa F McBride, Michael Bode and Hugh P Possingham, 'Prioritising global conservation efforts', (2006) 440 *Nature* 337.

<sup>925</sup> See for example Hughes' survey of the literature on strategic management in chapter 10 of Owen E Hughes, *Public Management and Administration: An Introduction* (Palgrave Macmillan, 4<sup>th</sup> ed, 2012).

### 6.3 Origins and Development of National Approaches to Biodiversity

The publication of the Brundtland Report in 1987 spurred action internationally and domestically, not only on SD but also on specific aspects of it, including biodiversity conservation. Brundtland argued that states had a responsibility to ensure ‘an adequate environment for present as well as future generations [as] an important step towards sustainable development’.<sup>926</sup> It recommended the negotiation of new environmental conventions, including on biodiversity, with UNEP put forward as the appropriate body to facilitate this.<sup>927</sup>

#### 6.3.1 International Origins: Convention on Biological Diversity

The United Nations Environment Programme convened an ad hoc working group of experts in 1988 to explore the need for a convention on biodiversity. This was the beginning of a process that led ultimately to the opening for signature of the Biodiversity Convention at the Rio Conference in June 1992. Australia signed the Convention at that time, ratifying the following year.<sup>928</sup> The Convention currently has 196 parties, making it near-universal, although significantly the USA is numbered among the small number of non-parties.

##### *Relevant Provisions of the Biodiversity Convention*

The convention is a framework convention based on three objectives of conserving biodiversity, using its components sustainably and sharing the benefits of genetic resources equitably (see Box 6.1 for key provisions).<sup>929</sup> The preamble to the convention recites both the intrinsic value of biodiversity and its utility; and the importance of biodiversity for maintaining life sustaining systems of the biosphere. It also reaffirms both the sovereignty of states over their own biological resources and their responsibility for conserving biodiversity and using biological resources sustainably. The preamble concludes that the

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<sup>926</sup> WCED, above n 7, 272.

<sup>927</sup> WCED, above n 7, 274.

<sup>928</sup> See <<http://www.environment.gov.au/biodiversity/international/australias-first-national-report-convention-biological-diversity>>, (viewed on 23 April 2018).

<sup>929</sup> Article 1. The term ‘biodiversity’ used here is a contraction of ‘biological diversity’. The sharing of the benefits of genetic resources and provisions relating to Indigenous peoples are not discussed here.

parties are determined to conserve biodiversity and use it sustainably for the benefit of present and future generations.

## CONVENTION ON BIOLOGICAL DIVERSITY

### *Preamble*

The Contracting Parties,

*Conscious* of the intrinsic value of biological diversity ... and aesthetic values ...

*Conscious also* of the importance of biological diversity for evolution and for maintaining life sustaining systems of the biosphere.

*Affirming* that the conservation of biological diversity is a common concern of humankind.

*Reaffirming* that States have sovereign rights over their own biological resources.

*Reaffirming also* that States are responsible for conserving their biological diversity and for using their biological resources in a sustainable manner.

*Concerned* that biological diversity is being significantly reduced by certain human activities.

*Aware* of the general lack of information and knowledge regarding biological diversity ...

...

*Noting also* that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.

...

*Determined* to conserve and sustainably use biological diversity for the benefit of present and future generations.

Have agreed as follows:

### *Article 1. Objectives*

The objectives of this Convention ... are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources ...

...

### *Article 6. General Measures for Conservation and Sustainable Use*

Each Contracting Party shall, in accordance with its particular conditions and capabilities:

(a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and

(b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

### *Article 7. Identification and Monitoring*

Each Contracting Party shall, as far as possible and as appropriate ... :

(a) Identify components of biological diversity important for its conservation and sustainable use ...:

(b) Monitor ... the components of biological diversity ...:

- (c) Identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity ...; and
- (d) Maintain and organize ... data, derived from identification and monitoring activities ...

*Article 8. In-situ Conservation*

Each Contracting Party shall, as far as possible and as appropriate:

- (a) Establish a system of protected areas ...  
...
- (c) Regulate or manage biological resources important for the conservation of biological diversity ... with a view to ensuring their conservation and sustainable use;
- (d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;
- (e) Promote ... sustainable development in areas adjacent to protected areas ...;
- (f) Rehabilitate ... degraded ecosystems and ... promote recovery of threatened species ...  
...
- (i) Endeavour to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and the sustainable use of its components:  
...
- (l) Where a significant adverse effect on biological diversity has been determined pursuant to Article 7, regulate or manage the relevant processes and categories of activities:  
...

*Article 9. Ex-situ Conservation*

Each contracting party shall, as far as possible and as appropriate ...:

- (a) Adopt measures for the ex-situ conservation of components of biological diversity ...

*Article 10. Sustainable Use of Components of Biological Diversity*

Each Contracting Party shall, as far as possible and as appropriate:

- (a) Integrate consideration of the conservation and sustainable use of biological resources into national decision-making;
- (b) Adopt measures ... to avoid or minimize adverse impacts on biological diversity;  
...

*Article 11. Incentive Measures*

Each Contracting Party shall, as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.  
...

*Article 14. Impact Assessment and Minimising Adverse Impacts*

Each contracting party, as far as possible and as appropriate, shall:

- (a) Introduce appropriate procedures requiring environmental impact assessment ...

*Article 26. Reports*

Each Contracting Party shall ... present to the Conference of the Parties, reports on measures which it has taken for the implementation of the provisions of this Convention and their effectiveness in meeting the objectives of this Convention.

**Box 6.1 Relevant Provisions of the Convention on Biological Diversity<sup>930</sup>**

<sup>930</sup> *Biodiversity Convention*, above n 111.

In the body of the convention, the key substantive provision is Article 6, which requires countries to develop national strategies, plans or programs for the conservation and sustainable use of biological diversity and to integrate biodiversity conservation and sustainable use into relevant plans and policies.<sup>931</sup> The obligations in the five articles that follow Article 6, to identify and monitor biodiversity; minimise impacts; undertake in-situ and ex-situ conservation, and adopt conservation incentives, amount to a tacit suggestion that these are for significant areas to be addressed in national strategies. Several other provisions require measures that would support national strategies, such as research and public education.<sup>932</sup> Finally, Article 26 requires each party to report on measures it has taken to implement the Convention and the effectiveness of those measures in meeting convention objectives, but there is no provision for peer-review or other 'name and shame' provisions that would identify or seek to rectify poor performance. This 'trust, implement and report' approach contrasts with another approach often found in environmental conventions of implementing a specific regime as a matter of legal obligation.<sup>933</sup> The combined effect of the 'sustainable use' recital and objective; the recitals of precaution and intergenerational equity; and the requirements for policy integration and impact minimisation (Art 10), in-situ and ex-situ conservation (Arts 8, 9) and the assessment of projects and policies with a view to harm minimisation; is to create a policy paradigm that is essentially one of ecological sustainability applied to biodiversity.

#### *Australian Proposal for Broader Policy Integration Not Supported*

Interestingly, Australia had secured the inclusion in the draft convention of an article highlighting the importance of economic incentives to biodiversity conservation, and now sought to extend this to address disincentives. Cabinet therefore endorsed negotiating objectives that:

the Convention should recognise the role of economic incentives in biodiversity conservation,  
Parties should examine the scope for reform of relevant policies, persons impacting negatively on

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<sup>931</sup> The phrase 'as far as possible and appropriate' and other phrases that qualify various obligations in the Convention are not discussed here because the focus is on the policy nature of the obligations, not their legal meaning.

<sup>932</sup> See Arts 12, 13.

<sup>933</sup> See for example the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, 3 March 1973, 14537 UNTS 993 (entered into force 1 July 1975).



biodiversity should bear the costs of their activities and policy development should take into account the full range of biodiversity values ....<sup>934</sup>

In other words, Australia had pursued the inclusion of an obligation to internalise externalities relevant to biodiversity, in an approach akin to the ‘polluter-pays’ principle. The submission in fact included a lengthy supporting rationale not just for this, but for economic efficiency more generally in the management of land outside of reserves: for well-defined property and use rights that would provide incentives for conservation; for improved information, tradable rights, or traditional regulation, as appropriate; and for pricing regimes that internalise all external costs.<sup>935</sup> Accordingly, the submission argued that the convention should include an obligation that countries ‘at least examine the impact of existing institutions, policy frameworks and systems of rights and incentives.’<sup>936</sup> This approach was unsuccessful and the provision ultimately included in the convention, Article 11, simply and blandly encouraged measures that act as incentives to use biodiversity sustainably. Clearly most countries were not prepared to support a requirement to consider the sheeting home of costs to resource users, despite the potential benefits of economic efficiency.

### **6.3.2 Domestic Origins of National Biodiversity Strategy: 1989 Statement and 1992 Intergovernmental Agreements**

In Australia, the link between sustainability and biodiversity policy was made from the outset. The 1989 Statement included commitments to play a leading international role in the development of what became the Biodiversity Convention and also to develop a national biodiversity strategy.<sup>937</sup> When Cabinet considered signing the Convention, it had before it advice that Australia was well-placed to implement the Convention through existing programs, the ESD Process and the development of the Biodiversity Strategy.<sup>938</sup>

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<sup>934</sup> Australian Government, *Cabinet Minute 15838* of 24 September 1991, endorsing ‘Convention on Biological Diversity — Australian Delegation Objectives’, Cabinet Submission 8296, 16 September 1991 (NAA A14039, 8296).

<sup>935</sup> Ibid Attachment F.

<sup>936</sup> Ibid 43.

<sup>937</sup> Hawke, *1989 Statement*, above n 325, 18.

<sup>938</sup> Australian Government, ‘Signature of Convention on Biological Diversity at UNCED’ Cabinet Submission 322, 27 May 1992; decision recorded in *Cabinet Minute 4501*, June 1992 (NAA A14217, 322) 4. Prime Minister Keating reiterated his government’s commitment to develop the National Biodiversity Strategy in his broad ‘One Nation’ policy statement in February 1992: Paul Keating, *One Nation*, Statement by The Prime Minister the Hon P J Keating MP, 26 February 1992 (AGPS 1992) 26–27.

*Developing the 1996 Strategy*

Moving to implement the domestic aspects of these commitments, the Government convened a Biological Diversity Advisory Council (Advisory Council), a mixed group of scientists and representatives of the environment ministerial council (ie state officials), conservation groups and industry (including farmers) in 1991. The Government later released a draft national strategy, prepared by the Advisory Council, for public comment in March 1992.<sup>939</sup> At this point the strategy was a Commonwealth initiative, but provision was soon made in the NSESD for the strategy to be finalised as a national initiative.<sup>940</sup> Following public comment, a revised draft strategy, now a national (intergovernmental) document, was sent to all jurisdictions in October 1993 for adoption.<sup>941</sup>

*Cabinet Deliberation*

In her Cabinet Submission seeking endorsement of the strategy, Environment Minister Ros Kelly advised Cabinet that the conservation of biodiversity was recognised in the NSESD as a foundation of ESD and as one of its three core objectives. (Box 6.2). She also advised Cabinet that the strategy would meet Australia's commitment under the Biodiversity Convention and be a 'major vehicle' in efforts to achieve ESD.

FOR CABINET

NATIONAL STRATEGY FOR THE CONSERVATION OF AUSTRALIA'S  
BIOLOGICAL DIVERSITY

...

BACKGROUND

The Government first made a commitment to the development of a national strategy on biological diversity in the [1989 Statement] ...

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<sup>939</sup> Department of the Arts, Sport, the Environment and Territories, *Annual Report 1991–92* (AGPS, 1992) 100. For some further detail on the development of the strategy by the Advisory Council, see Don McMichael [Chair, Advisory Council], 'The Draft National Strategy for the Conservation of Australia's Biological Diversity', in Department of Environment, Sport and Territories and Ecological Society of Australia, *Biological Diversity: Its future conservation in Australia, Proceedings of the Fenner Environment Conference 1992* (Department of Environment, Sport and Territories 1993).

<sup>940</sup> COAG, NSESD, above n 354, Objective 9.1.

<sup>941</sup> Department of the Arts, Sport, the Environment and Territories, *Annual Report 1991–92*, above n 939; Biological Diversity Advisory Committee, 'Draft National Strategy for the Conservation of Australia's Biological Diversity' (BDAC 1993). The ministerial council, the Australian and New Zealand Environment and Conservation Council (ANZECC) consisted of Australian and New Zealand environment ministers and was formed in July 1991 by amalgamating the former Australian and New Zealand Environment Council and the Council of Nature Conservation Ministers.

## THE ISSUES

4. The importance of the conservation of biological diversity has been recognised at the national level. The National Strategy for ESD recognises it as a foundation of ESD and as one of its three core objectives. It is also one of the principles of the Intergovernmental Agreement on the Environment ...
- ...
6. The National Strategy ... aims to bridge the gap between current activities and the identification, conservation and management of Australia's biological diversity. It will signify Australia's commitment to the Convention and be a critical reference point as we move to implement the Convention. The strategy will also be a major vehicle in our efforts to achieve [ESD].
7. The Strategy makes clear its role in the overall ESD process and lists the core objectives and guiding principles of the ESD Strategy in the Goal Statement. The Strategy covers a broad range of issues, from ensuring the protection of our biological diversity for future generations to the ecologically sustainable use of our biological resources. Emphasis is placed on how actions must ensure the integration of environmental, social and economic concerns.
8. The major focus of the Strategy is the recognition that conservation of biological diversity can and must occur in an integrated manner across the whole landscape. This is particularly important recognising that about 70 percent of Australia's land area is under the control of private landholders and resource managers. The concept of planning and managing on a bioregional scale, using natural boundaries to facilitate the integration of conservation and production-oriented management, is strongly emphasised. I believe that such an approach will do much to bridge the gap between management of protected areas and the conservation of biological diversity outside of protected areas.

...

## FINANCIAL CONSIDERATIONS

20. Many of the actions proposed in the Strategy are already being pursued as part of other national strategies or initiatives within individual jurisdictions, and will not require enhanced resources from governments. Other actions may require current programs to be upgraded (to varying extents) with additional resources, or may require new programs to be developed.
21. Commonwealth requirements will be considered in the budget context. This will need to take into account the Government's medium-term fiscal objective of reducing the Budget deficit to around one percent of GDP by 1996/97. Budgetary constraints are recognised in the Strategy. It recommends that governments review funding and administration of existing programs that relate to the conservation of biological diversity to identify the potential for reallocation of resources to support Strategy initiatives.

## RECOMMENDATIONS

...

**Box 6.2 Extracts from 1993 Cabinet Submission, 'National Strategy for the Conservation of Australia's Biological Diversity'<sup>942</sup>**

<sup>942</sup> Australian Government, 'National Strategy for the Conservation of Australia's Biological Diversity, *Cabinet Submission 1382*, 24 November 1993; decision recorded in *Cabinet Minute 2482*, 16 December 1993' (NAA A14217 1382).

Outlining the strategy briefly, the minister advised Cabinet that the strategy emphasised both policy integration and bioregional planning and management, which would do much to bridge the gap between management inside and outside of protected areas.

Despite the inclusion in strategy of 'priorities and timeframes', Kelly advised Cabinet that many of the proposed actions were already being pursued under other national or jurisdictional initiatives and would not require 'enhanced resources' from governments. Other actions might require current programs to be upgraded (to varying extents) with additional resources, or may require new programs to be developed, but Commonwealth requirements would be considered (separately) in the budget context, with the strategy recognising budgetary constraints and recommending that governments review existing conservation programs to identify potential resource reallocations.<sup>943</sup> Further, notwithstanding Australia's advocacy in the convention negotiations the year before of the need to review policy with a view in particular to internalising biodiversity-related externalities, the submission made no reference to such a review, or to a financial or cost-benefit analysis. As a result, there was no substantive analysis of the longer-term budgetary or economic implications of the Strategy. Nor was there a detailed implementation plan with milestones or other performance measures. The absence of such analysis or planning allowed a 'have your cake and eat it' narrative to survive. On the one hand, the submission told Cabinet that the strategy was a major policy vehicle for ESD and implied that it would trigger significant long-term changes to patterns of development through bioregional planning. On the other hand, the submission implied that few significant program changes were required and that the costs of those changes that were required could be considered later because they were not significant. Despite this inherent contradiction, Cabinet endorsed the draft strategy.<sup>944</sup>

### *Adoption and Early Implementation*

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<sup>943</sup> See also Strategy, Chapter 7.

<sup>944</sup> *Cabinet Minute 2482*, 16 December 1993 (NAA A14217 1382). Agreement to endorse the draft was subject to several minor changes and the authority to negotiate 'final word changes ... where this does not involve any significant policy change ...'

The Commonwealth endorsed the strategy in 1993, but securing the agreement of all governments would take a further two years: the strategy was not endorsed by COAG until December 1995.<sup>945</sup> In the meantime, neither the Keating nor incoming Howard Governments announced additional or reallocated resources to support the strategy. With the draft strategy emphasising bioregional planning and noting that tri-level intergovernmental cooperation would be essential to success, the Keating Government had sponsored a workshop on bioregional planning, but lost office before it could (if it intended to) pursue this further than publishing the workshop proceedings.<sup>946</sup> The only direct measure adopted by the incoming Howard Government to implement the strategy was to maintain the Advisory Council as a statutory committee.<sup>947</sup> This government would later legislate a mechanism for bioregional planning, but to date it has only been used for Commonwealth waters (see chapter seven).

## **6.4 National Strategy for the Conservation of Australia's Biodiversity (1996–2009)**

Although the 1996 Strategy attracted no new resources, included no means of requiring implementation, and had no implementation plan, it was on foot for 15 years. Moreover, the contradictory narrative of the Cabinet submission, of urgent and major change being subject to routine budgetary conditions, was, without irony, included in the foreword.<sup>948</sup>

The following sections discuss the content and implementation of the strategy.

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<sup>945</sup> *Cabinet Submission 1382*, above n 942, 1. The reasons for the long delay are unclear. Officials advised Minister Kelly that no difficulties were expected: Department of the Environment, Sport and Territories, Deputy Executive Director, Environment Strategies Directorate, 'Adoption of the National Strategy for the Conservation of Australia's Biological Diversity', Submission 9640 to Minister Kelly, 4 November 1993 (Department of the Environment, Sport and Territories file 93/7020); Department of the Environment, Sport and Territories, *Annual Report 1995–96* above n 597, 30. A briefing for a meeting of ANZECC in April 1995 advises the Minister that it 'appears that political factors are affecting the positions of NSW and Victoria ...': Department of the Environment, Sport and Territories, 'National Biodiversity Strategy', briefing for discussion of agenda item 20, National Biodiversity Strategy, ANZECC, seventh meeting, 29 April 1994 (Department of the Environment, Sport and Territories file 94/02103).

<sup>946</sup> 1996 Strategy, above n 897, 8; R Breckwoldt (ed) and Department of the Environment, Sport and Territories, *Approaches to Bioregional Planning: Part 1, Proceedings of the Conference 30 Oct–1 Nov 1995*, Melbourne, Biodiversity Series, Paper No 10 (DEST, 1996).

<sup>947</sup> Hill, *Investing in Our Natural Heritage*, 1996, above n 615, 6; *EPBC Act*, Part 19 Div 2 (repealed by Act No 47 of 2016); Department of the Environment, Water, Heritage and the Arts, 'Biological Diversity Advisory Council 1996–2000', departmental website archived at <<http://155.187.2.69/biodiversity/science/bdac/council.html>> (viewed 27 April 2018); *EPBC Act* Part 19 Div 2. Appointments to the council lapsed in 2007 and div 2 was repealed in 2016.

<sup>948</sup> 1996 Strategy, above n 897, Foreword.

### **6.4.1 Distilling the Policy Logic**

The policy logic of the 1996 strategy can be distilled from its front parts, the introduction, goal and principles (see Box 6.3). The problem being addressed was that human activity had led to dramatic declines in the distribution and abundance of many species, while maintaining biodiversity required much more than just protection in reserves. Consistent with the Biodiversity Convention, the strategy was concerned with the sustainable use of biological resources and with safeguarding Earth's life-support systems: the ecologically sustainable management of all Australian environments was essential for the conservation of biological diversity. A rich biodiversity offered the broadest array of options for sustainable economic activity, the nurturing of human welfare and adaptation to change.

## **NATIONAL STRATEGY FOR THE CONSERVATION OF AUSTRALIA'S BIOLOGICAL DIVERSITY**

### **Introduction**

Biological diversity is the variety of all life forms ...

...

Maintaining biological diversity is much more than just protecting wildlife and their habitats in nature conservation reserves. It is also about the sustainable use of biological resources and safeguarding the life-support systems on Earth. Ecologically sustainable management of all Australia's terrestrial and marine environments is essential for the conservation of biological diversity.

The benefits of conserving biological diversity are numerous ... An environment rich in biological diversity offers the broadest array of options for sustainable economic activity, for nurturing human welfare and for adapting to change.

...

Benefits arising from the conservation of Australia's biological diversity are not, however, restricted to the continued harvest of resources — they include the provision and maintenance of a wide array of ecological services ... They are fundamental to the quality of our life and our economy, but they are often grossly undervalued.

Another benefit of conservation is avoidance of the rising costs incurred through degradation of ecological systems ...

...

The aesthetic values of our natural ecosystems and landscapes contribute to the emotional and spiritual well-being of a highly urbanised population ...

There is in the community a view that the conservation of biological diversity also has an ethical basis ...

...

... Conservation efforts are under-resourced, in places uncoordinated, and sometimes inappropriate ... Large parts of Australia are not managed sustainably ...

Of fundamental importance to the successful conservation of biological diversity is incorporation of the concept in all relevant decision-making and management processes ...

The loss of biological diversity cannot be slowed effectively unless its underlying causes are directly confronted ...

...

Australia needs a comprehensive approach to bridge the gap between current efforts and the effective identification, conservation and management of Australia's biological diversity

...

All sectors of the community will share the costs and benefits of conserving biological diversity ...

...

Governments accept responsibility for protecting Australia's biological diversity for the benefit of the community now and in the future.

...

## Goal

The Strategy recognises that

- The conservation of biological diversity provides significant cultural, economic, educational, environmental, scientific and social benefits for all Australians.
- There is a need for more knowledge and better understanding of Australia's biological diversity.
- There is a pressing need to strengthen current activities and improve policies, practices and attitudes to achieve conservation and sustainable use of biological diversity.
- We share the Earth with many other life forms that have intrinsic value and warrant our respect, whether or not they are of benefit to us.

It acknowledges the core objectives of the National Strategy for Ecologically Sustainable Development:

...

**The Goal is to protect biological diversity and maintain ecological processes and systems.**

## Principles

The following principles have been adopted as a basis for the Strategy's objectives and actions and should be used as a guide for implementation.

1. Biological diversity is best conserved in situ.
2. Although all levels of government have clear responsibility, the cooperation of conservation groups, resource users, indigenous peoples, and the community in general is critical to the conservation of biological diversity.
3. It is vital to anticipate, prevent and attack at source the causes of significant reduction or loss of biological diversity.
4. Processes for and decisions about the allocation and use of Australia's resources should be efficient, equitable and transparent.
5. Lack of full knowledge should not be an excuse for postponing action to conserve biological diversity.
6. The conservation of Australia's biological diversity is affected by international activities and requires actions extending beyond Australia's national jurisdiction.
7. Australians operating beyond our national jurisdiction should respect the principles of conservation and ecologically sustainable use of biological diversity and act in accordance with any relevant national or international laws.
8. Central to the conservation of Australia's biological diversity is the establishment of a comprehensive, representative and adequate system of ecologically viable protected areas integrated with the sympathetic management of all other areas, including agricultural and other resource production systems.
9. The close, traditional association of Australia's indigenous peoples with components of biological diversity should be recognised, as should the desirability of sharing equitably benefits arising from the innovative use of traditional knowledge of biological diversity.

...

**Box 6.3 Extracts from the National Strategy for the Conservation of Australia's Biodiversity (1996)<sup>949</sup>**

<sup>949</sup> Council of Australian Governments, *1996 Strategy*, above n 897, (original emphasis).



Biodiversity was worth maintaining for the continued harvesting of natural resources and to provide a wide array of ecological services; to avoid rising costs from the degradation of ecological systems (presumably the cost of substitution or restoration); and for cultural, aesthetic and ethical reasons. In addition, Australia had made international and domestic commitments to biodiversity through the Biodiversity Convention and the NSESD. There was a pressing need for additional effort, as existing efforts to conserve biodiversity were not sufficient. In fact, large parts of Australia were not managed sustainably.

The goal was to protect biodiversity and maintain ecological processes and systems. This would require actions across all biodiversity, not just within Australia but beyond. While in isolation it might be unclear what ‘protecting’ biodiversity required, this goal was expressed in the context of acknowledging the core objectives of the NSESD and accepting its principles.<sup>950</sup> Read together, the National Biodiversity Strategy and NSESD thus provided a clear and coherent rationale for protecting biodiversity, consonant with the broader goal of ESD: that protecting biodiversity would safeguard the welfare of future generations by maintaining the ecological processes and systems on which that welfare depended.

In achieving the goal for biodiversity, a comprehensive approach was required, one that was integrated across jurisdictional boundaries and approached national problems with nationwide strategies and standards. Implementation would require cooperation and coordination across all those responsible for management of biodiversity and loss of biodiversity could not be slowed effectively unless its underlying causes were directly confronted. It was therefore of fundamental importance that the concept of biodiversity conservation be incorporated into broader decision-making and management processes and specifically that biodiversity conservation objectives be integrated into policies and decisions.

### *Objectives and Actions*

The strategy is arranged by reference to seven sets of objectives, arranged by chapter. Each objective within the chapter-sets is supported by individual actions. The first four sets of objectives have direct application to biodiversity itself, while the remaining three relate to

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<sup>950</sup> Ibid 5. The Chair of the Advisory Committee had described the draft Strategy as ‘a step towards implementing’ recommendations of the ESD Intersectoral Issues Report that a comprehensive framework for a national strategy on biodiversity be developed, on the grounds that ‘ESD should aim at the prevention of further loss of biological diversity’: McMichael, above n 939, 25. The reference is to the *ESD Intersectoral Issues Report*, above n 703, at 34–35.

supporting processes. Paraphrased, the four direct sets of objectives are directed to conserving existing biodiversity (chapter 1); to integrating biodiversity conservation with economic activities, such as forestry, that are based on the direct use of natural resources, so as to achieve ecologically sustainable outcomes (chapter 2); to minimising the impact of processes that threaten biodiversity, such as the clearing of native vegetation (chapter 3); and to improving understanding of biodiversity (chapter 4). The three supporting sets of objectives are directed to securing: community involvement (chapter 5); international participation, because the issue was inherently a global issue and because of the implications for trade of biodiversity conservation (chapter 6); and effective implementation (chapter 7). The underlying logic of the direct objectives reflected the logic of the Convention: conserve biodiversity directly (eg through a reserve system); keep the consumption of biodiversity components sustainable (presumably by keeping consumption at or below recruitment); manage threatening processes such as land clearing; and undertake research. The logic of the supporting objectives was to obtain broad domestic stakeholder support, deal with the issue in its global context in a manner consistent with domestic policy, and to pay attention to follow-through, recognising that biodiversity is a long-term issue.

Broadly, this policy logic was maintained through the individual objectives within objective sets, but it weakens at the level of some of the individual actions specified under each objective because of the absence of any detail on how these actions might implemented. Analysis of one objective set and several actions will suffice to illustrate the point. The objectives in chapter one, under the title of 'Conservation of biological diversity across Australia', address the identification of biodiversity and threatening processes; bioregional planning; integrated management for conservation; establishing a system of protected areas while also addressing off-reserve conservation; general wildlife conservation such as wildlife trade regulation; specific measures for threatened species and ecological communities; recognising and drawing on indigenous knowledge; and ex-situ research.<sup>951</sup> In short, the logic is to use a variety of established approaches to conservation, from research and identification to on- and off-reserve conservation, in an integrated manner.

The coherence of this approach is then lost at the level of supporting actions, as seen in the following examples. The first example is found under objective 3.5, 'Fire'. The specified actions of researching the role of fire in Australian ecosystems and of developing

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<sup>951</sup> Objectives 1.1 to 1.9.

management regimes that minimise the adverse impact of fire on biodiversity flow naturally from objective 3.5, which is to reduce the adverse impacts of altered fire regimes on biodiversity (even if the detail of who will take these actions and by when is lacking). Two contrasting examples are found under objective 1.8 relating to the use of traditional knowledge and objective 3.2 concerning native vegetation clearance. Neither action 1.8.1, which includes '[p]rovid[ing] resources for the conservation of traditional biological knowledge through cooperative ethnobiological programs' and action 3.2.3, which calls on governments to develop financial incentives to encourage land managers to conserve native vegetation, say anything about the absolute or relative quantum of the incentives, or the scope of their application, and they are thus hollow in the absence of such specifics of implementation. The high-level implementation actions found in chapter 7, such as action 7.1.1, which includes a target of arresting and reversing the decline of remnant native vegetation by 2000 (ie within five years), are essentially a wish-list and leave it to future governments to take difficult resourcing decisions.

#### *Accommodating Biodiversity Objectives with Other Goals*

The problem, the solution (ends) and the *desirable* means were clear, but the logic of the means of implementation was virtually absent. With the strategy including the dissembling statement that '[t]he relative economic costs and benefits are very difficult to quantify', governments fell back on hedging and superficial optimism.<sup>952</sup> As to hedging, on the one hand, governments accepted responsibility for protecting Australia's biodiversity for the benefit of the community now and in the future, and, if we were to achieve a sustainable future, for immediate change, to live within the earth's carrying capacity. On the other hand, actions would be implemented within budgetary and economic constraints. As to wishful thinking, the need to conserve biodiversity was a community problem which would bring (unknown) economic costs, but the cloud had a silver lining: there were significant economic benefits to be gained, including future opportunities for resource use and substantial future savings in the cost of rehabilitating species and ecosystems. However, these 'opportunities' were unspecified and the strategy did not mention that the future savings from avoided rehabilitation were dependent on incurring present costs.

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<sup>952</sup> Ibid 4.

*Measuring Progress*

The policy logic concerning measurement is of a similar tone to the substantive elements of the strategy. The commitment to measuring progress and improving the strategy through enhanced knowledge appeared strong. Chapter four of the strategy explained that the full and effective implementation of the strategy would require a considerable improvement in knowledge and understanding of Australia's biodiversity, requiring 'major research initiatives', including the compilation of existing knowledge and long-term monitoring.<sup>953</sup> Appropriate actions were set out, including a joint Commonwealth-State rapid assessment of Australia's biodiversity; a national program to advance information and modelling tools; research into performance indicators in achieving ecologically sustainable management; research into conservation biology; the completion of a comprehensive inventory of Australia's ecosystems; and the establishment of a national coordinated program of long-term ecological monitoring.<sup>954</sup> As far as possible, information on Australia's biodiversity would be made readily accessible and the accumulated information used 'to evaluate and improve current management, to meet the objectives of ecologically sustainable use of biological diversity ...'<sup>955</sup> There were however no implementation specifics beyond commitment to a timeframe, that Australia would have implemented a long-term biodiversity monitoring program by 2000 and by 2005 would have sufficient information from long-term monitoring to identify and understand the nature and extent of threats to Australia's biological diversity to develop actions for dealing with threats.<sup>956</sup>

**6.4.2 Implementing the Strategy**

The 1996 Strategy included a chapter on implementation which opened with the rationale that it was essential for effective implementation that priorities and timeframes be identified, and that it was also important 'to establish the arrangements necessary for this to occur', including provision for national coordination and review and the provision of

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<sup>953</sup> Ibid 33.

<sup>954</sup> See Chapter 4, actions 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.7.

<sup>955</sup> Ibid, action 4.1.9.

<sup>956</sup> See actions under 7.1.1 'Priorities and timeframes'. Later initiatives contributed but the connections were *post hoc*. For example, the *Australian Terrestrial Biodiversity Assessment 2002* identified itself as informing the (ongoing) 1996 strategy, while the earlier 2001 review of the strategy (see below) had identified that assessment as assisting several priority actions in the strategy: see National Land and Water Resources Audit, *Australian Terrestrial Biodiversity Assessment 2002* (NLWRA 2002); (ANZECC 2001) above n 581, 91.

adequate funding.<sup>957</sup> The strategy would be reviewed every 5 years. Domestically, only one comprehensive review was published, in 2001. This is discussed in 6.4.3. A second formal review, in 2006–2008, was rolled into the development of a follow-on strategy, and is discussed in section 6.4.5. There are however other de facto sources of review, also discussed below: national reports submitted under article 26 of the Biodiversity Convention, SoE reports and OECD country performance reviews.<sup>958</sup>

### *Provision for Implementation in the Strategy*

Objectives 7.1 to 7.4 of the 1996 Strategy dealt, respectively, with implementation through priority actions within stated timeframes; establishment of implementation arrangements and for monitoring effectiveness; ensuring that the strategy was complemented by state and bioregional strategies; and ensuring that the costs of protecting biodiversity were shared equitably, reflecting both contributions to degradation and benefits from protection. On their face, the listed actions are a credible reflection of the objectives. For example, the strategy nominates a ministerial council (ANZECC) to assume overall responsibility for implementation, along with lead agencies in each jurisdiction and an expert advisory council.<sup>959</sup> This was complemented by the reiteration of an earlier commitment to integrate biodiversity conservation into decision-making at all levels of government.<sup>960</sup>

There were however several significant flaws in this approach. First, there was no provision for an implementation plan as such, only a list of priority actions and timeframes for them. This was justified obliquely with the argument that:

The objectives and their actions do not contribute equally to ensuring protection of biological diversity, nor are they equally urgent. Many of the objectives ... are being pursued as part of other national strategies ... Many of the actions are being pursued ... without an urgent need for

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<sup>957</sup> 1996 Strategy, above n 897, 41 (Chapter Seven).

<sup>958</sup> Article 26 of the Convention provides that: 'Each Contracting Party shall, at intervals to be determined by the Conference of the Parties, present to the Conference of the Parties, reports on measures which it has taken for the implementation of the provisions of this Convention and their effectiveness in meeting the objectives of this Convention.' Successive decisions of the Conference of the Parties have required reports every four years: for example, in decision X/10, the COP requested Parties to submit their fifth national report by 31 March 2014. Australia submitted national reports in 1998, 2001, 2005, 2009 and 2014. The SoE reports for 2001 and 2006 canvassed implementation of the strategy. Australia was the subject of OECD conducted country performance reviews in 1998 and 2007: see OECD *Environmental Performance Reviews: Australia* (1998), above n 577, and OECD *Performance Reviews: Australia* (2007), above n 629.

<sup>959</sup> The advisory council is discussed above in 6.3.2.

<sup>960</sup> See actions 7.2.1–7.2.4.

enhanced resourcing from governments. These objectives and actions will provide a guide for determining priorities ...<sup>961</sup>

In other words, a full action or implementation plan was not needed because many of the objectives and actions would look after themselves, as they were already being implemented in the ordinary course of business or were part of other national strategies. Even if this were true, it ignores the practicalities of translating such a comprehensive plan into action. The need for an implementation plan had been emphasised by the chair of the advisory committee preparing the plan, at an early stage:

I should like to emphasise that the Strategy is just that — a strategy — and not an action plan. It attempts to identify the strategic objectives and the main thrust of action necessary to achieve those objectives. Virtually every one of the actions would require considerable amplification and detailed planning to become a blueprint for practical action, and in particular would require the identification of which persons or organisations would be responsible for taking or co-ordinating the action and of the means (both financial and other) for carrying it out.<sup>962</sup>

In fact, a draft action plan had been prepared by the Advisory Committee in 1992–1993 (ie mostly experts and stakeholders), and then further considered by the Task Force of Commonwealth and State officials coordinating the Biodiversity Strategy. The Task Force however:

Recognised that it was not possible to have a uniform set of priorities across all jurisdictions. As such the Task Force decided that the draft Action Plan is to be an internal working document which is not to be ... presented for endorsement by either ANZECC or governments.<sup>963</sup>

As a result, the Commonwealth would develop its own implementation arrangements and would be 'drawing on the draft Action Plan as appropriate'.<sup>964</sup> It thus appears that because officials thought a uniform approach to implementation unachievable, the only alternative was that each jurisdiction should look after its own implementation.

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<sup>961</sup> 1996 Strategy, above n 897, 4.

<sup>962</sup> McMichael, above n 939, 23.

<sup>963</sup> Department of the Environment, Sport and Tourism, Director Biodiversity Unit, 'Draft Biological Diversity Action Plan', minute to Secretary, 2 December 1993 (Department of the Environment, Sport and Tourism file 93/2749).

<sup>964</sup> Ibid.

The second flaw, discussed in chapter five, was that the ministerial council was an inappropriate implementation body because it was a policy-coordination forum, lacking executive authority, direct accountabilities (beyond an unclear accountability to COAG, itself a body with limited accountability) and with very limited resources.<sup>965</sup> This was compounded by inappropriate accountabilities in some individual actions. For example, one action was that ANZECC would report regularly to governments (ie to themselves) on the state of the environment by including ‘state of biological diversity’ reports in SoE reports. Of course, the latter would already cover biodiversity and so this was a hollow commitment.<sup>966</sup>

#### *Biodiversity Strategy Executive Group*

Despite these flaws, and a lack of new funding, ANZECC moved to implement the Strategy, at least initially.<sup>967</sup> It established a Biodiversity Strategy Executive Group of senior officials (‘Executive Group’) in 1996, with terms of reference that included responsibility to ‘[c]oordinate, at the national level, implementation of [the strategy]’ and to ‘[d]evelop intermediate milestones to guide the achievement of objectives and priorities’.<sup>968</sup> Further, the Advisory Committee, originally a temporary body, was now given an ongoing role to advise the Commonwealth generally and ‘report regularly to ANZECC on further development and implementation of the national strategy.’<sup>969</sup>

Initially, the Executive Group attempted to coordinate implementation actively, by identifying responsibilities for (and gaps in) implementation, and by developing milestones to guide achievement of priority actions.<sup>970</sup> However, over time, it focused only on reporting, addressing issues such as the difficulty of obtaining information and how to

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<sup>965</sup> DoE administered a small trust fund ‘to support environmental research and special activities approved by [ANZECC]’. In 1995/96 for example, the balance in the fund was \$1.2m: see Department of the Environment, Sport and Territories, *Annual Report 1995–96*, above n 597, 179.

<sup>966</sup> Action 7.2.1(c).

<sup>967</sup> No specific provision was made in the 1995 or 1996 Commonwealth Budgets to appropriate or redirect funds to the strategy, although no doubt investments under the new Natural Heritage Trust, established in 1996 and including a ‘biodiversity package’ would have contributed to the advancement of actions in the strategy and a number of projects concerning biodiversity information and awareness were funded from existing appropriations: see Hill, *Investing in Our Natural Heritage 1996* above n 615, especially at 5, 31–32; Department of the Environment, Sport and Territories, *Annual Report 1996–97*, above n 597, 56.

<sup>968</sup> Department of the Environment, Sport and Territories, *Annual 1996–97* above n 597, 56; Department of Environment, Sport and Territories, ‘The Biodiversity Strategy Executive Group’, Background Paper 3, (Department of Environment, Sport and Territories file 96/457).

<sup>969</sup> Department of Environment, Sport and Territories, ‘The Biodiversity Strategy Executive Group’, above n 968.

<sup>970</sup> Biodiversity Strategy Executive Group, ‘Report to Standing Committee on Conservation’, May 1996, (Department of the Environment, Sport and Territories, file 96/457).

interpret some of the actions in the strategy for reporting purposes.<sup>971</sup> This appears to have resulted from a combination of a lack of clearly defined reporting responsibilities and a lack of resources. The senior officer responsible for secretariat functions had sought a clarification of roles, arguing that:

It is not currently clear whether [Executive Group] members see their role as actively participating in the process in a proactive way, or whether they see themselves as an approval body, whose role is simply overseeing the process of implementation of the Strategy. I would see this latter role to be more appropriate for the section to fulfil, given the diversity and breadth of actions contained in the Strategy.<sup>972</sup>

There is no evidence of the ministerial council taking action in response to the Executive Group's reports, nor of reports to heads of government, despite early itemised reports raising various issues, such as 'there remains a need for coordination and action on this issue' and 'States and Territories could be asked to provide more specific information on this action ...'<sup>973</sup> At a later point, it appears that the reporting may have become tendentious. The Advisory Committee raised implementation concerns with the Minister, drawing from a draft report by the Executive Group containing suggestions that:

- State, territory and Commonwealth agencies are putting their programs in the best light, rather than identifying real problems in implementation;
- In some instances the information is not accurate, either because no one is prepared to acknowledge that identified targets will not be met, or because officers have not had enough resources to supply detailed responses;
- In some cases targets will not be met because prerequisite conditions do not exist, as in long-term ecological monitoring ...
- Monitoring and evaluation of the implementation process is not adequately resourced ...<sup>974</sup>

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<sup>971</sup> See Biodiversity Strategy Executive Group, 'BSEG's role in reporting progress in implementing the National Strategy — proposed new approach' Agenda Paper 1, BSEG Meeting of 21 October 1998 (Department of the Environment file 98/01316).

<sup>972</sup> Department of the Environment, Assistant Secretary, Biodiversity Conservation Branch, 'Biodiversity Strategy Executive Group Involvement in Monitoring and Reporting on Priority Actions of *The National Strategy for the Conservation of Australia's Biological Diversity*', Minute to First Assistant Secretary, 26 March 1998 (Department of the Environment file 98/01316).

<sup>973</sup> Biodiversity Strategy Executive Group, 'Report from BSEG to SCC on the Implementation Status of Priority Actions in the National Strategy for the Conservation of Australia's Biological Diversity' (Department of the Environment file 97/02631), comments in relation to items (b), relating to ethnobiological programs, and (c), relating to the identification and description of major ecosystems, respectively.

<sup>974</sup> Roger L Kitching, Chair, Biological Diversity Advisory Committee, Letter to Senator Robert Hill, Minister for the Environment, (Department of the Environment file 98/01316). Note that the file copy is unsigned and undated; while this may indicate that the letter was not sent, in the writer's experience it is not



In the absence of the central authority and resources to drive implementation the best that the Executive Group could do was to collate information available from other initiatives. For example, in relation to vegetation clearance, its minutes record the following:

5.1.7 Vegetation clearance and retention

...

The Secretariat learned [that] currently the best consolidated information was in a report of the ANZECC Working Group on Nature Conservation on Private Land ... Members were provided with this report. It was noted that while this report gave a good overview of relevant programs, it did not sufficiently address their adequacy. It was agreed that the [National Vegetation Initiative] will address these priority actions but [Executive Group] needs to be better informed as to what the impact of the NVI will be.<sup>975</sup>

*Ultimate Weakness in Strategy*

Even if the ministerial council had undertaken a strong coordination and reporting effort, the weaknesses of implementation were inherent to the Strategy, which listed commitments but lacked any incentives or sanctions, even a simple ‘name and shame’ mechanism, that would stimulate compliance. This is illustrated by objective 3.2, which is to ‘[e]nsure effective measures are in place to retain and manage native vegetation, including controls on clearing ...’ Read with action 7.1.1(l), which specifies that by 2000, Australia will have ‘arrested and reversed the decline of remnant native vegetation’, this is a bold commitment. Action 3.2.2 supports that commitment by calling on governments to review legislation relating to clearing to ‘ensure that criteria for assessing land clearance applications take account of biological diversity conservation, land protection, water management, and landscape failures ...’ while other actions call, among other things, for the development of supporting incentive and rebate programs.<sup>976</sup> There was however no provision for implementation beyond the weak coordination mechanism already discussed. While it might be reasonable to rely on governments to implement their commitments without incentive or sanction, this was not the case here. The subsequent finding of the 2001 SoE

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uncommon that file copies of correspondence do not indicate whether an original was sent. On balance, in the writer’s view the letter was probably sent.

<sup>975</sup> Biodiversity Strategy Executive Group, Minutes of Fifth Meeting, 26 March 1997, 5.

<sup>976</sup> See actions 3.2.1–3.2.6, complemented by implementation actions 7.3.1 –7.4.1.

Report was that the target to arrest and reverse the decline of native vegetation was 'not close to being met'.<sup>977</sup>

### 6.4.3 Early Reviews

#### *First Five-Year Review*

The first scheduled five-yearly review of the 1996 strategy was published in 2001. At first blush, especially bearing in mind that was an initial review of an open-ended strategy, progress looked good, with 10 of 31 objectives assessed as having been achieved already.<sup>978</sup> On closer examination, progress was limited. Of the 10 objectives achieved, five involved undertaking a process or activity rather than securing an on-ground outcome, and four involved completing or maintaining existing initiatives.<sup>979</sup> Further, six objectives were assessed as 'not achieved', a poor outcome after five years, especially given that the vague label 'partially achieved' could have been applied with accuracy to any instance of limited progress.

In relation to the 15 objectives assessed to be 'partially achieved', the assessment consisted of brief evaluative text supported by lists of 'activities' undertaken in various jurisdictions (ie not explicitly the 'actions' in the strategy), without explanation of how those activities contributed to the achievement of the strategy. Thus, for example, for objective 1.2, which is to manage biodiversity on a regional basis, using natural boundaries to facilitate integrated management, the general evaluation was to the effect that there had been an increase in awareness of biodiversity issues in planning and development processes, combined with significant investment; further, several states were identified as having or adopting regional approaches, though with the qualification that the availability of data was a problem.<sup>980</sup> Some activities listed under this objective, for example the Interim Biogeographic Regionalisation for Australia (IBRA), are self-evidently a significant

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<sup>977</sup> Australian State of the Environment Committee and Australia (eds), *Australia State of the Environment 2001* (CSIRO Publishing, 2001) 48 ('*SoE 2001*').

<sup>978</sup> See Australian and New Zealand Environment and Conservation Council (ANZECC), 'Review of the National Strategy for the Conservation of Australia's Biological Diversity' (ANZECC 2000).

<sup>979</sup> The five process or activity-based objectives were 1.3, encouraging the limitation of integrated management techniques; 3.8, relating to environmental assessment processes; 5.1 and 5.2, concerned with community involvement; and 6.1 and 6.3, requiring Australia's support for and effective involvement in, international processes. The four objectives requiring the completion or maintenance of existing processes were 1.9, concerning ex-situ conservation; 2.4, involving the completion of regional forest agreements; and 2.7, concerning the sustainable use of wildlife.

<sup>980</sup> ANZECC, 'Review of the National Strategy for the Conservation of Australia's Biological Diversity', above n 978, 17–19.

contribution to the strategy. At the other end of the spectrum, the fact, for example, that various bodies in Western Australia were recorded as participating in the development of several kinds of regional strategies or approaches gives the reader no real sense of how much effort or progress had been made in that state towards managing biodiversity on a regional basis.

The generality of reported implementation such as this left the reviewers little option but to cast their conclusions in general terms, such as, in relation to invasive species:

There has been considerable activity aimed at reducing the threat posed by invasive species in all jurisdictions. Despite this, invasive species continue to pose a major threat to biodiversity. The National Weeds Program and the National Feral Animal Control Program provide a strategic approach ... The EPBC Act includes provision for protecting Australia's environment from invasive species.<sup>981</sup>

Overall:

This review has identified a number of areas that pose key threats to Australia's biodiversity and must be addressed if the strategy's objective is to be achieved. The review has also identified areas that require attention if future threats to biodiversity are to be avoided.<sup>982</sup>

### *Conclusions on Review*

The 2001 Review is essentially a report on activity (ie inputs) rather than on outputs or outcomes, and is vague on occasions, while the national reports covering the same period are no more revealing. The overall assessment was left to the SoE report, which found that there were a number of positive responses to pressures on biodiversity including the enactment of the EPBC Act and the establishment of the Natural Heritage Trust. These represented significant progress; moreover, the COAG agreements on biodiversity among other things (ie the 1996 Strategy), were 'considerable achievements'.<sup>983</sup> At the end of the day however, many of the key threats to biodiversity persisted, the rate of land clearance had accelerated, there was 'still limited knowledge on many biodiversity values' and 'Australia is far from achieving sustainability'.<sup>984</sup>

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<sup>981</sup> Ibid 80.

<sup>982</sup> Ibid.

<sup>983</sup> *SoE 2001*, above n 977, 7, 112–113.

<sup>984</sup> Ibid.

*National Reports Under Biodiversity Convention*

Australia's national reports under the Biodiversity Convention are similarly general. The early reports consist mostly of descriptions of programmatic activity and information drawn from state-of-the-environment and other primary reports.<sup>985</sup> Like the domestic review, to the extent that issues are identified as arising, this is done in general terms such as the following comment in Australia's second national report on monitoring:

However, greater emphasis needs to be given to the acquisition of knowledge, gathered through comprehensive biological surveys in marine, estuarine and freshwater habitats and through taxonomic work in herbaria, museums and other institutions.<sup>986</sup>

Overall, the early national reports are of limited value in assessing progress in implementing the strategy. Perhaps surprisingly, as improved reporting might lead to criticism, Australia called for changes to reporting requirements, in its 3<sup>rd</sup> national report, commenting that there was an 'absence of any evidence that national reports effectively feed into long-term global monitoring and reporting of the state of the world's biodiversity ...' and a 'perception that national reporting is no more than a matter of process.'<sup>987</sup> Subsequently the parties agreed that reports should be more outcome-focused, for example the reporting of national progress towards the 2010 biodiversity targets that had been adopted under the Convention.<sup>988</sup>

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<sup>985</sup> See for example Australian Government, 'Australia's National Report to the Fourth Conference of the Parties to the Convention on Biological Diversity' (Environment Australia 1998) (*First National Report*); Australian Government, 'Australia's Third National Reports to the Convention on Biological Diversity' (DEH 2005) 3–4, (*Third National Report*) available at <<https://www.environment.gov.au/biodiversity/international/australias-third-national-report-convention-biological-diversity>> (accessed on 29 December 2016).

<sup>986</sup> Australian Government, 'Second National Report to the Convention on Biological Diversity' (Environment Australia, 2001) (*Second National Report*), available at <<http://www.environment.gov.au/biodiversity/international/australias-second-national-report-convention-biological-diversity>> (viewed 5 August 2016).

<sup>987</sup> Australia 2004, *Third National Report*, above n 985 245–246.

<sup>988</sup> See Convention on Biological Diversity, Secretariat, 'Conference of the Parties Decision VIII/14 (2006)', <<https://www.cbd.int/doc/decisions/cop-08/cop-08-dec-14-en.pdf>> (viewed 29 December 2016).

*OECD Performance Review Considers Biodiversity*

In conducting its first ‘environmental performance review’ of Australia in 1997, at about the same time as Australia’s first national report, the OECD considered biodiversity management, concluding that:

*It is not certain that the improvements so far have the strength, scope and speed to reverse the trends in these pressures and related biodiversity degradation.*<sup>989</sup>

However, with diplomatic politeness, it then pulled its punches, expressing confidence in then-current policies:

However, the Natural Heritage Trust and its multiplier effect will increase the momentum of Australia's efforts to reach its domestic objectives and international commitments in this area.<sup>990</sup>

#### **6.4.4 Response to First Five-Year Review**

*National Objectives and Targets for Biodiversity Conservation 2001–2005*

Even before the five-year review was conducted, Minister Hill had seen it as an opportunity to become more outcome-focused. On being briefed on the then-forthcoming review, Hill had annotated on the brief that ‘the recommendations should now be translated into easily followed goals for the next 5 years — no more than 2 or 3 pages which then become a checklist. Then we concentrate on outcomes rather than process.’<sup>991</sup>

Hill was partially successful. The ministerial council responded to the review of the 1996 Strategy by adopting National Objectives and Targets for Biodiversity Conservation 2001–2005 (National Objectives).<sup>992</sup> These set a range of targets for native vegetation, freshwater, marine and estuarine ecosystems, invasive species, dryland salinity, grazing, climate change, indigenous knowledge, access to information, and institutional reform. However, they were

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<sup>989</sup> OECD, *Environmental Performance Reviews: Australia* 1998, above n 577, 72 (original emphasis).

<sup>990</sup> Ibid.

<sup>991</sup> Robert Hill, annotation dated 15 December 1999 on brief from First Assistant Secretary, Natural Heritage Division, ‘ANZECC Paper — Review of the *National Strategy for the Conservation of Australia’s Biological Diversity*’, Minute 99/1118 of 25 November 1999, (Department of the Environment and Heritage file 2000/01828).

<sup>992</sup> Environment Australia, ‘National Objectives and Targets for Biodiversity Conservation 2001–2005’ (EA, 2001).

agreed by only six of the nine jurisdictions.<sup>993</sup> A number of the targets in the National Objectives were ambitious, especially that of reducing the 'net national rate of land clearance to zero' by 2001 (ie immediately), but also those of 'prevent[ing] clearance of ecological communities with an extent below 30%' of pre-1750 levels by 2003; and of having programs in place to protect areas of 'high quality' native vegetation by 2005.<sup>994</sup> This certainly addressed the findings of the review concerning long implementation periods and immeasurable objectives. The problem now was essentially the opposite, to translate high ambition into on-ground outcomes.

The Commonwealth sought to implement the National Objectives through bilateral agreements with the States to implement an extension of the Natural Heritage Trust program. The agreement with NSW for example refers to the National Objectives and repeats the commitment to prevent clearance of ecological communities with an extent below 30% of pre-1750 levels.<sup>995</sup> Queensland was a special case, not only because it was the locale of some 80% of land clearing at the time,<sup>996</sup> but because negotiations were both acrimonious. While space does not allow a detailed evaluation of this means of implementing the National Objectives, they appear to have had little discernible effect. While land-clearing in Queensland continued to decline in the several years after the bilateral agreement, the evidence suggests that this due to State initiatives rather than the Commonwealth efforts.<sup>997</sup> More generally, Australia had the highest rates of deforestation in the developed world between 1990 and 2009.<sup>998</sup> Further, the National Objectives were not reported against as a stand-alone measure and there is no ready means to discern their national impact: the second review of the Biodiversity Strategy in 2006 did not refer to them, confining its references to SoE reports and the NLWRA,<sup>999</sup> while the 2006 SoE

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<sup>993</sup> Queensland, Tasmania and Northern Territory did not participate. More generally, see Department of the Environment, *Annual Report 2000–01* (DoE, 2001), 3.

<sup>994</sup> See objectives 1.1.1–1.1.4, which included several other targets not quoted here. The mechanisms to reduce net land clearance to zero were to operate at State and regional levels — ie this was not a commitment to Commonwealth laws on land clearing.

<sup>995</sup> Commonwealth of Australia and the State of New South Wales, 'Bilateral Agreement Between The Commonwealth of Australia and The State of New South Wales to Deliver the Natural Heritage Trust, August 2003 (Australian Government 2003), available at <<https://web.archive.org/web/20060824130238/http://www.nht.gov.au/bilaterals/nsw/pubs/nsw.pdf>> (viewed 30 August 2018).

<sup>996</sup> Australian Government, *Investing for a Sustainable Australia: Commonwealth Environment Expenditure 2003–04* (Commonwealth of Australia, 2003) 23.

<sup>997</sup> B Alexander Simmons et al, 'Spatial and Temporal Patterns of Land Clearing during Policy Change' (2018) 75 *Land Use Policy* 399; Macintosh, Andrew Macintosh, 'The Australia Clause and REDD: A Cautionary Tale' (2012) 112(2) *Climatic Change* 169, 181.

<sup>998</sup> Macintosh, above n 997, 169, citing UNFCCC Secretariat (2011) greenhouse gas data from UNFCCC, available at <[http://unfccc.int/ghg\\_data/ghg\\_data\\_unfccc/items/4146.php](http://unfccc.int/ghg_data/ghg_data_unfccc/items/4146.php)>.

<sup>999</sup> See National Biodiversity Strategy Review Task Group 2006, below n 1018, 5.

report concluded that ‘biodiversity continues to be in serious decline in many parts of Australia’.<sup>1000</sup> It appears that the Commonwealth’s funding, over three years, was not a sufficient inducement to secure, at least, the target of reducing the net national rate of land-clearing to zero.

### *Longer-Term Response*

Consistent with a decreasing emphasis on implementation of ESD over time, (see chapter four) the focus of the Commonwealth’s involvement in biodiversity policy was increasingly in terms of national implementation the Biodiversity Convention. In 2002 the parties to the convention adopted a strategic plan that sought, among other things, ‘to achieve by 2010, a significant reduction of the current rate of biodiversity loss at the global, regional and national level’.<sup>1001</sup> This was followed in 2004 by the adoption of a more detailed framework of goals and targets to facilitate progress towards that goal, including a single quantitative target that ‘at least 10% of each of the world’s ecological regions is effectively conserved by 2010’.<sup>1002</sup> Australia could achieve broad targets such as this more easily than the (domestic) National Objectives of halting land clearance and protecting high quality native vegetation, because they were more amenable to ‘success’ by creating reserves in the vast, semi-arid and sparsely populated inland of Australia. It allowed Australia to report in its third national report in 2004 that, ‘taken as a whole, [there was] a positive trend over the period between this and the last ... National Report, indicating progress towards meeting the Convention’s 2010 target’.<sup>1003</sup> This positive picture had to be tempered considerably in the fourth national report in light of the re-established SoE Report:

Conservation efforts within Australia have increased since the last report to the Convention. Despite this, the Australia State of the Environment 2006 report found that biodiversity is in serious decline ... Similarly, the second environmental performance review of Australia by the Organisation for Economic Cooperation and Development (OECD 2008) reports that the downward trend in the conservation status of some species continues. It also found some major pressures on biodiversity have not eased since the previous OECD performance review in 1998.<sup>1004</sup>

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<sup>1000</sup> *SoE Report 2006*, above n 1107, 36.

<sup>1001</sup> United Nations, ‘Decisions Adopted by The Conference of The Parties To The Convention On Biological Diversity At Its Sixth Meeting, The Hague, Netherlands, 7–19 April 2002’, UN Doc UNEP/CBD/COP/6/20, Decision VI/26 (19 April 2002) [11].

<sup>1002</sup> United Nations, ‘Decisions Adopted by The Conference of The Parties To The Convention On Biological Diversity At Its Seventh Meeting, Kuala Lumpur, 9–20 February 2004’, UN Doc UNEP/CBD/COP/7/30, Decision VII/30 (20 February 2004), Decision VII/30.

<sup>1003</sup> *Third National Report*, above n 987, 7.

<sup>1004</sup> Australian Government, ‘Australia’s Fourth National Report to the United Nations Convention on Biological Diversity’ (Australian Government, 2009) (*Fourth National Report*) 3.

#### 6.4.5 Further Reviews 2002–2008 Including Second Five-Year Review

Biodiversity policy was reviewed on a number of occasions in the 2000s, but these reviews produced little change in policy or outcomes. Responses ranged from ignoring reports to a re-tilling of the ground and further strategy-development.

##### *Prime Minister's Science Engineering and Innovation Council Report on Biodiversity*

Responding to the conclusions of the 2001 SoE Report and other reports that Australia's natural systems were in decline, a 2002 study prepared for the Prime Minister's Science, Engineering and Innovation Council, an independent advisory body,<sup>1005</sup> identified investment opportunities for government, directed to furthering the National Objectives initiative, on the principle that 'it is far cheaper to maintain our natural systems than it is to allow them inadvertently to be damaged and, subsequently, to inherit a costly repair bill'. The government did not respond to this report, other than by making the claim, incidentally through a media release on another report, that the report justified its spending programs.<sup>1006</sup> The report appears to have been unwelcome and the low-key response a case of positioning in case of criticism for inaction.

##### *Biodiversity Decline Working Group*

In 2003, after considering the *National Land and Water Resources Audit Terrestrial Biodiversity Assessment 2002*, the Natural Resources Management Ministerial Council requested that senior officials:

develop for Council's consideration a national program to address the identified biodiversity decline, focusing on high priority, system-wide threats and the most cost-effective measures that

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<sup>1005</sup> Prime Ministers' Science, Engineering and Innovation Council, *Sustaining Our Natural Systems and Biodiversity* (PMSEIC 2002), available at <<http://www.industry.gov.au/science/PMSEIC/PMSEICMeetings/Pages/EighthMeeting-31May2002.aspx>> (viewed 27 October 2016). The paper was prepared by a working group, three of whom were eminent scientists and one an eminent environmental economist; the members were Steve Morton, Greg Bourne, Paul Cristofani, Peter Cullen, Hugh Possingham and Mike Young.

<sup>1006</sup> See David Kemp (Minister for the Environment and Heritage), 'New Report Highlights Australia's Biodiversity Challenges', *Media Release*, 24 April 2003 (Office of the Minister for the Environment and Heritage 2003).



will lead to long-term improvements to biodiversity assets, taking into account existing programs and the need to avoid duplication.<sup>1007</sup>

This resolution was as if the 1995 Strategy and the National Objectives did not exist. The council agenda paper made no mention of these initiatives and even the Commonwealth's briefing for the discussion, prepared jointly by the environment and agriculture departments, included only the generalised advice that 'it should be recognised that there are a range of programs and policies that seek to achieve similar outcomes.'<sup>1008</sup> Continuing this policy amnesia, the resulting report of the Biodiversity Decline Working Group did not discuss or evaluate these other national initiatives, instead simply describing them in a 'case-study'-style box, with the statement that these measures would be reviewed in 2006.<sup>1009</sup> The rationale in the report was that in circumstances of a continuing decline of biodiversity, 'the time is right' for governments to review progress, with strategies and significantly increased investment needed to reverse current trends.<sup>1010</sup> Twenty-five Commonwealth and State programs were reviewed, though only in a very general way.<sup>1011</sup> The report identified 'key elements of effective programs'<sup>1012</sup> and made recommendations made on objectives and priority actions for a national approach.<sup>1013</sup> While space does not permit a detailed comparison of this recommended approach with existing strategies, there is significant overlap between the two, with proposed new objectives including, for example, 'more effective management that will reverse the decline in extent and condition of populations and habitat of species and communities' and 'improved knowledge of biodiversity condition and status, and better decision-making for biodiversity conservation'.<sup>1014</sup> Surprisingly, given the specificity of the National Objectives and the limited national effort to implement them, the report found that:

the main challenges to achieving most effective delivery of outcomes to address biodiversity decline are considered to be defining clear program objectives and purpose, and improving program design.<sup>1015</sup>

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<sup>1007</sup> Biodiversity Decline Working Group, 'A National Approach to Biodiversity Decline: Report to the Natural Resource Management Ministerial Council' (NRMMC 2005) 1.

<sup>1008</sup> Department of the Environment and Heritage and Department of Agriculture, Fisheries and Forests, 'National Land and Water Resources Audit — Terrestrial Biodiversity Assessment 2002', briefing note, agenda item 3C, NRMMC, fifth meeting, 3 October 2003 (Department of the Environment and Heritage file 2003/07895).

<sup>1009</sup> Ibid 8.

<sup>1010</sup> Ibid i, 3.

<sup>1011</sup> Ibid 10. The programs are listed at 29–30.

<sup>1012</sup> Ibid, annex 2.

<sup>1013</sup> Ibid, section 3.

<sup>1014</sup> Ibid 21.

<sup>1015</sup> Biodiversity Decline Working Group, above n 1007, i.

The working group was asked to prepare a coordinated response, which was considered by the ministerial council in 2006.<sup>1016</sup> Ministers simply decided to integrate the findings into the second, imminent, review of the 1995 Strategy, supporting the hypothesis that the working group had only been convened so that ministers could be seen to be responding to the 2002 assessment.<sup>1017</sup>

### *Second Five-Year Review*

The Natural Resources Ministerial Council initiated the scheduled second five-year review of the strategy in 2006 and a background paper was prepared to facilitate stakeholder discussions.<sup>1018</sup> Instead of publishing a report containing detailed performance information, the paper simply described various government activities, such as legislative changes and funding programs, before making a segue into 'emerging issues' and seeking stakeholder views on a revised strategy.<sup>1019</sup> There is no indication in the papers as to the reason for this approach, but the result was to gloss over evidence of failure to meet the objectives and targets under the 1995 Strategy and the National Objectives and thus to minimise the likelihood of governments being held to account.<sup>1020</sup> In any event, several major environment groups commissioned their own review of the National Objectives; the

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<sup>1016</sup> Natural Resource Management Ministerial Council, 'National Approach to Biodiversity Decline', Resolution 9.6, ninth meeting, 27 October 2005, in Department of Agriculture, Fisheries and Forests and Department of the Environment and Heritage; *Record and Resolutions of the Natural Resource Management Ministerial Council: Ninth Meeting, Launceston, 27 October 2005* (DAFF and DEH 2005) 35 ('*Record and Resolutions*'); Natural Resource Management Ministerial Council, 'National Approach to Address Biodiversity Decline', Agenda Item 5B, Meeting 11, Christchurch, 24 November 2006 (Department of the Environment, Water, Heritage and the Arts file 2009/06713).

<sup>1017</sup> Natural Resource Management Ministerial Council, 'National Approach to Biodiversity Decline', above n 1016, 30. This decision was just one component of its broader decision in which Ministers noted the finding of the working group that three system-wide threats — habitat loss and ecosystem decline; invasive species and climate change — were the main drivers of biodiversity decline and agreed to address these by adopting certain priority actions for current and future programs. However, there was no implementation mechanism in the decision, leaving for example an agreed priority action of 'invest[ing] in biosecurity' hanging as, on a beneficial interpretation, a statement of principle and intent.

<sup>1018</sup> National Biodiversity Strategy Review Task Group, 'Review of the National Strategy For the Conservation of Australia's Biological Diversity: A Background Paper Prepared By the National Biodiversity Strategy Review Task Group' (National Biodiversity Strategy Review Task Group, 2006), available at <<http://www.environment.gov.au/system/files/resources/fde7c13-3ba3-44c1-9f89-7377de1133b4/files/strategy-review.pdf>> (viewed 5 August 2016).

<sup>1019</sup> Ibid 16. Section 4.2 on 'information management' did refer to several external reporting documents such as the state-of-the-environment report.

<sup>1020</sup> Neither the agenda paper considered by ministers, nor the minute of the decision, canvas the reasons for the adoption of this approach: see Natural Resource Management Ministerial Council, 'National Strategy for the Conservation of Australia's Biological Diversity', Agenda Paper 7A, Meeting 10, Sydney 21 April 2006 (Department of the Environment and Heritage file 2006/05162); Natural Resource Management Ministerial Council, 'National Strategy for the Conservation of Australia's Biological Diversity', Meeting 10, Sydney, Friday 21 April 2006, Resolutions, Item 7A (Department of the Environment and Heritage file 2006/08602).

review findings, described as ‘fair’ in an internal departmental briefing, were that 52% of targets were not met within timeframes.<sup>1021</sup>

The background paper had been informed by an external assessment of the alignment of both the 1995 Strategy and the National Objectives, with relevant national, state, territory and industry biodiversity policy and codes of practice.<sup>1022</sup> This assessment found ‘a high level of consistency between national biodiversity policy ... and state and territory biodiversity strategies, at the level of overarching goals ...’ but that:

[b]elow this level, the state and territory strategies vary considerably in focus, emphasis, strategic objectives and implementation programs. For instance, few of the strategies contain the targets and objectives of the National Objectives.<sup>1023</sup>

Nevertheless, the assessment argued that this divergence was ‘less significant than it appears’, because:

At face value, the state biodiversity strategies ... appear to be less comprehensive than the [1995 Strategy] and National Objectives. But the states and territories have also produced a range of related policy and strategies relating to water, vegetation, coasts, threatened species etc. that, when combined, address most of the aspects of biodiversity conservation encompassed in national policy.

... Further, the state and territory strategies appear to be less concerned with some key threats to biodiversity conservation; a key component of national policy. On closer examination, it is apparent that these threats, particularly clearing, invasive species and wildfire, are dealt with in most jurisdictions under dedicated policy and programs that specifically address them, rather than under the biodiversity policy per se.<sup>1024</sup>

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<sup>1021</sup> See Griffin NRM, *Small Steps for Nature: A review of progress towards the National Objectives and Targets for Biological Diversity Conservation 2001–2005* (WWF Australia and Humane Society International, 2004); Department of the Environment and Heritage, Land Water and Coasts Division, ‘WWF/HSI Review of the National Objectives and Targets for Biodiversity Conservation’, undated brief to Deputy Secretary (Department of the Environment and Heritage file 2006/05163). Note that the report by Griffin NRM reported on performance by all jurisdictions, even though Queensland, Tasmania and the NT did not adopt the National Objectives.

<sup>1022</sup> Griffin NRM, *Biodiversity: Managing a National Asset: An assessment of the alignment of the 1996 National Strategy for the Conservation of Australia’s Biological Diversity and the National Objectives and Targets for Biodiversity Conservation 2001–2005 with relevant national, state/territory and industry biodiversity strategies, natural resource management policies and codes of practice*. (DEH 2006), available at <<http://www.environment.gov.au/archive/biodiversity/publications/strategy/bio-managing-asset.html>> (viewed 10 August 2016).

<sup>1023</sup> Ibid 4.

<sup>1024</sup> Ibid 8.

This may be the case, but the implication of a failure to link state policies and programs back to the national strategy has significant implications. While a good environmental data system might identify positive environmental changes and be able to count these as progress towards nationally agreed goals, the lack of such a system, together with the lack of causal connections between strategy and measures would make it difficult if not impossible to evaluate first, whether effort matched commitment and secondly which measures were the most cost-effective, to allow policy learning. In a strategy, means count as well as ends. Moreover, the nature of the study itself is curious: rather than examining whether the strategy worked, the brief was in essence to report on whether policies, plans and programs were aligned — ie whether there was alignment on paper, rather than alignment of outcomes (or indeed to report them).

Returning to the background paper, it identified 'key biodiversity conservation issues', but these related to possible content of a revised strategy including institutional and process-related matters.<sup>1025</sup> Stakeholder submissions were published but not responded to; they were later summarised in Australia's fourth national report to the Biodiversity Convention in a single sentence:

[D]espite positive views about the existence of a strategy, its relevance and application in on-ground activity was questioned by many.<sup>1026</sup>

Governments did not report the review outcomes. Rather, the consultation draft of what became the 2010 Strategy included a section, 'Earlier Reviews', which made no mention of previous or current reviews!<sup>1027</sup> Instead, this section recited blandly that '[t]here have been many achievements but the continuing biodiversity decline demonstrates that more work is required ...' (The draft did however record elsewhere the conclusion of the 2006 SoE report that biodiversity was in serious decline).<sup>1028</sup> Once more, it was as if policy-makers wished simply to start again. The major areas of concern identified in responses to the consultation draft included 'lack of quantifiable targets, specific timeframes, clearly identified areas of responsibility and funding commitments'.<sup>1029</sup> The 2010 Strategy would

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<sup>1025</sup> Ibid 8.

<sup>1026</sup> Australia, *Fourth National Report*, above n 1004, 21.

<sup>1027</sup> See National Biodiversity Strategy Review Task Group, 'Australia's Biodiversity Conservation Strategy 2010–2020, Consultation draft' (National Biodiversity Strategy Review Task Group 2009) 16 (Heading 2.1).

<sup>1028</sup> Ibid 10.

<sup>1029</sup> Department of the Environment, Water, Heritage and the Arts, 'Overview of the National Biodiversity Strategy review and consultation process, Annex B to Natural Resource Management Standing Committee, 'Review of the National Strategy For the Conservation of Australia's Biological Diversity' Agenda Paper 5.2, 272

later record without mention of the National Objectives and their detailed targets and measures, and as if a novel idea, that stakeholders thought that a revised strategy should ‘contain measurable targets’.<sup>1030</sup>

*Second OECD Environmental Performance Review*

The OECD conducted its second environmental performance review of Australia in 2006, once again considering biodiversity but, perhaps prompted by the then-current domestic focus on natural resource management programs, discussing biodiversity in conjunction with ‘nature management’.<sup>1031</sup> This somewhat de-emphasised biodiversity, with nothing said about the Biodiversity Strategy or National Objectives other than to mention their status as taking their place among a ‘series of “frameworks” intended to serve as a common structure for framing policy objectives and monitoring results.’<sup>1032</sup> While complimentary of the regional focus of natural resource management programs as a vehicle for biodiversity conservation, the point of substance was again linked to weak implementation:

The framework approach promises to be influential as long as the associated *monitoring and reporting* are actually carried out. There is still considerable progress to be made before the required monitoring is in place.<sup>1033</sup>

*Marine Biodiversity Decline Working Group*

In 2005, the ministerial council agreed to extend the scope of the National Approach to Biodiversity Decline to include marine biodiversity.<sup>1034</sup> As with the earlier report on terrestrial biodiversity, the resulting report, endorsed by the ministerial council, does not attempt to review the performance of existing policy and programs, but instead provides a brief overview of them, before arguing that:

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Meeting 18, 25 September 2009 (Environment Department file 2010/00433). (The submissions themselves are available on a web archive, <<https://www.environment.gov.au/node/14490>> (viewed 21 September 2016)). Similar criticisms were made by 92 scientist signatories to a letter critiquing the Consultation Draft published in a scientific journal: see Arthington and Nevill ‘Australia’s Biodiversity Conservation Strategy 2010–2020: Scientists’ Letter of Concern’, above n 907.

<sup>1030</sup> 2010 Strategy, above n 897, 32. The National Objectives and Targets had in effect been dismissed on the previous page by noting that it was not agreed to by all jurisdictions (at 31).

<sup>1031</sup> OECD, *Environmental Performance Reviews: Australia* 2007, above n 629, 74, 100.

<sup>1032</sup> Ibid.

<sup>1033</sup> Ibid 74 (original emphasis).

<sup>1034</sup> Natural Resource Management Ministerial Council, ‘National Approach to Biodiversity Decline’, Resolution 9.6, ninth meeting, 27 October 2005, above n 1016, 37.

[S]ignificant declines in some species and some general downward trends continue despite investments in programs to limit marine biodiversity decline. However, it does not necessarily follow from the available evidence that current programs are failing to improve outcomes compared to what would occur if the programs did not exist. The lack of baseline information, which makes it difficult to make definitive statements on the condition of marine biodiversity, also makes it difficult to assess the effectiveness of many or most current programs.<sup>1035</sup>

This appears to be an argument that, because it is not possible to review the performance of existing programs in the absence of baseline data (due to poor implementation) it would be better to start afresh, including starting afresh with monitoring and evaluation:

Based on scientific information and following consultation, jurisdictions have decided to invest in programs to address marine biodiversity decline. A general inability to be conclusive about positive impacts of programs does not necessarily mean that programs should cease but lends support to the case for better monitoring and evaluation of program effectiveness.<sup>1036</sup>

The report went on to 'suggest' a new national approach, based on eight 'key directions' arranged under four themes.<sup>1037</sup> This was a curious recommendation; it would have been more consistent with the conclusions to recommend increased effort in implementing the existing strategy. To propose a fresh start such as this, particularly so recently after a review and reinvigoration of existing strategy, is a significant (if implicit) admission of policy failure.

#### **6.4.6 Outcomes of 1996 Strategy**

Further effluxion of time has not made it any easier to assess the outcomes of the 1996 Strategy. The lack of implementation specifics, and in particular the lack of an attributed causal connection between strategy and measures means that any alignment between the strategy and on-ground outcomes may be coincidental. The process of formulating, reporting and reviewing the strategy within and between governments and stakeholders no doubt led to advances in thinking and some alignment of ideas, possibly validating the finding of Griffin NRM discussed above: ideas were aligned at a high level and, while

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<sup>1035</sup> Natural Resource Management Ministerial Council, 'Marine Biodiversity Decline — *A National Approach to Addressing Marine Biodiversity Decline* Report', Resolution 13.15, 13<sup>th</sup> meeting, 18 April 2008, in *Record and Resolutions*, above n 1016, 74; Marine Biodiversity Decline Working Group, *A National Approach to Addressing Marine Biodiversity Decline — Report to the Natural Resource Management Ministerial Council* (NRMMC, 2008) 12–13.

<sup>1036</sup> Ibid 13.

<sup>1037</sup> Ibid 32–33.

differences between jurisdictional approaches increased as one worked down towards on-ground programs, each jurisdiction was, on paper at least, driving at much the same thing. The question here however is whether the 1996 Strategy advanced ESD. There is no ready way to assess this beyond the general observation that biodiversity decline in Australia continued during the life of the strategy. Nor is there any evidence that a strategic approach has achieved more than would have been achieved by an ad hoc approach, in which individual and unconnected programs respond to immediate and local environmental pressures.

## 6.5 Australia's Biodiversity Conservation Strategy 2010–2030

The 2010 Strategy was adopted by the Ministerial Council in 2010. Relevant extracts are in Box 6.4. Ten national targets were included at a late stage following 'strong' and 'consistent' criticism of the draft strategy from both stakeholders and independent expert reviewers.<sup>1038</sup> In their foreword ministers noted that despite much effort, biodiversity continued to decline and, as a result, 'we need to take immediate and sustained action to conserve biodiversity.'<sup>1039</sup> In fact, the problem was so serious that 'business as usual is no longer an option'.<sup>1040</sup>

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<sup>1038</sup> Natural Resource Management Ministerial Council, 'Resolutions of NRMMC 16, 5 November 2009, Perth, Item 6A', in *Record and Resolutions*, above n 1043, especially paras 5, 22(f); Resolutions of NRMMC 17, 23 April 2010, Perth, Item 17.15 in *Record and Resolutions*, above n 1043, especially Annex C; see also Arthington and Nevill, *Letter of Concern*, n 907 above. It appears Minister Garrett used this criticism to pressure other ministers to include targets: see letter to members of NRMMC (undated) 2009 (Environment Department file 2010/00433).

<sup>1039</sup> 2010 Strategy, above n 897, 'Ministerial Council Foreword'.

<sup>1040</sup> *Ibid* 17, 21.

## Australia's Biodiversity Conservation Strategy 2010–2030

...

### Executive Summary

...

The priorities for action section identifies three national priorities for action to help stop the decline in Australia's biodiversity. These priorities for action are:

1. Engaging all Australians in biodiversity conservation through:
  - mainstreaming biodiversity
  - increasing Indigenous engagement
  - enhancing strategic investments and partnerships.
2. Building ecosystem resilience in a changing climate by:
  - protecting diversity
  - maintaining and re-establishing ecosystem functions
  - reducing threats to biodiversity.
3. Getting measurable results through:
  - improving and sharing knowledge
  - delivering conservation initiatives efficiently
  - implementing robust national monitoring, reporting and evaluation.

Each of the priorities for action is supported by sub-priorities, outcomes, measurable targets and actions which collectively provide a strategic focus for our efforts.

...

### Setting the Context

#### Our vision

Australia's biodiversity is healthy and resilient to threats, and valued both in its own right and for its essential contribution to our existence.

This Strategy sets out ways to turn this vision into a reality.

...

#### Call to action

...

This Strategy guides action to conserve our natural biological wealth for current and future generations.

...

Sustainable economic growth is a product of the wise use and management of natural and human resources, and we must promote actions to move our society to a sustainable basis, to conserve biodiversity and the productive capacity of Australian landscapes and seascapes.

...

The choices we make now will determine what opportunities we have available in the future. We must act on the understanding that the impacts of biodiversity decline need to



be addressed at all levels, and must be at the very core of our policy agendas and public debates.

Action now can help our native species and ecosystems adapt to change, and position us to minimise the overall loss of genetic, species and ecosystem diversity. In the face of accelerating change, the efforts we invest now in ecological sustainability may be the key to our own survival as a species.

We need to take decisive actions that are focused on achieving our highest and most pressing priorities for the environment we want to leave to coming generations. We need to continue building partnerships with the private and primary industries' sectors, in particular farmers and land managers, to strengthen our existing efforts, and to continually look for new evidence-based approaches that can better integrate the importance of biodiversity into the day-to-day functioning of all sectors of society.

This Strategy sets national directions and targets for biodiversity conservation over the coming decades. It aims to guide us in living sustainably and nurturing the natural systems that support our lives and our nation's productivity ...

*Business as usual is no longer an option.*

...

### **Monitoring and reporting on our progress**

For the strategy to make a real difference, progress needs to be tracked through robust, integrated and regular monitoring, and changes need to be implemented when evidence suggests current approaches are ineffective.

...

### **Box 6.4 Extracts from Australia's Biodiversity Conservation Strategy 2010–2030<sup>1041</sup>**

The Strategy identified three priorities for action, engaging all Australians, building ecosystem resilience in a changing climate and getting measurable results. There were three sub-priorities under each priority, supported by 10 high-level and specific national targets and timelines addressing all nine sub-priorities, along with 26 other actions. Internally, the story was different. Not all of the targets were as ambitious as they seemed. In relation to the target that an extra 600,000 km<sup>2</sup> of native habitat (representing approximately 4% of Australia's 14.9 million km<sup>2</sup> combined land area, territorial sea and exclusive economic zone) would be managed primarily for biodiversity conservation,<sup>1042</sup> the advice to ministers was, in effect, that 500,000 km<sup>2</sup> of this was already in train and half of which would be

<sup>1041</sup> 2010 Strategy, above n 897, (original emphasis).

<sup>1042</sup> Source of calculation: data from Geoscience Australia, <<http://www.ga.gov.au/scientific-topics/national-location-information/dimensions/area-of-australia-states-and-territories>>; <<http://www.ga.gov.au/scientific-topics/national-location-information/dimensions/oceans-and-seas#heading-1>> (viewed 10 August 2016) together with author's own calculations. This target was not further qualified as including certain biomes or ecosystems.

achieved almost immediately, making the target much more incremental than it appeared.<sup>1043</sup>

### 6.5.1 Distilling the Policy Logic

The stated vision of the Strategy was that Australia's biodiversity was healthy and resilient to threats, valued both in its own right and for its essential contribution to our existence. The 'call to action' explained that the strategy guided conservation of natural biological wealth for current and future generations. The strategy made it clear that it was implementing the Biodiversity Convention; unlike the 1996 strategy the new strategy made no reference to the NSESD or to the goal of ESD, settling instead for contextually supportive references to sustainability such as '[c]onserving biodiversity is central to living sustainably'.<sup>1044</sup> Notwithstanding the removal of express reference to ESD, this narrative remained consistent with ESD and continued to refer generally to the need for sustainability and the contribution of biodiversity to that (now undefined) goal. Further, even though it made no mention of this, the policy ambition of the strategy would need to be sufficiently high to address with credibility not only the 'sustainable consumption' objective of the Biodiversity Convention but sustainability-related targets adopted under the Convention, such the 'Aichi Target 4', adopted the year after the strategy:

By 2020 ... Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.<sup>1045</sup>

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<sup>1043</sup> The actual figure was 496,000 km<sup>2</sup>, consisting of 190,000 km<sup>2</sup> in projected increases in terrestrial protected areas, 6,000 km<sup>2</sup> of private land covered by conservation agreements and an additional 300,000 km<sup>2</sup> covered by marine bioregional plans, scheduled for finalisation in 2010 (Natural Resource Management Ministerial Council, Seventeenth Meeting, Darwin, 23 April 2010 Resolution 17.15, Annex D, in *Department of Agriculture, Fisheries and Forests and Department of the Environment and Heritage (eds), Record and Resolutions of the Natural Resource Management Ministerial Council* (DAFF and DEH 2010) 93.) The department was nevertheless a little nervous, perhaps concerned about budget cuts or parliamentary disallowance bioregional plans, advising Minister Burke that this target posed the greatest risk to the Australian Government among the 10 targets, as it 'can only be achieved through delivery of the expected investments in the National Reserve System and establishment of [anticipated] Marine Protected Areas ...': Department of Sustainability, Environment, Water, Population and Communities, 'Release of *Australia's Biodiversity Conservation Strategy 2010–2030*', brief to Minister Burke of 15 October 2010 (Environment Department brief B10/2076).

<sup>1044</sup> Ibid 31, 12.

<sup>1045</sup> United Nations, 'Decision Adopted by The Conference Of The Parties To The Convention On Biological Diversity At Its Tenth Meeting: X/2. The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets', UN Doc UNEP/CBD/COP/DEC/X/2 (29 October 2010), Aichi Biodiversity Target 4.

Under the heading of ‘what we have learnt’, the strategy properly points to the findings of the 2006 review, repeating its focus on policy alignment in preference to (unavailable) on-ground outcomes.<sup>1046</sup> Without hint of irony, the National Objectives, a set of specific targets, were dismissed as ‘not nationally implemented because of the lack of agreement to specific targets.’<sup>1047</sup> Perhaps this was a retrospective justification by the jurisdictions that had committed to the National Objectives, that they had not implemented them because the remaining jurisdictions had not joined in committing to the objectives.

The strategy explained that shifts in thinking since the previous strategy had led not only to the three new priority areas but to three shifts in approach: first, moving knowledge from the policy-independent domain of scientists, to the public and policy-central domain; secondly, moving monitoring reporting and evaluation from ‘one-off, discretionary, rigid’ approaches to approaches that were ‘long-term, consistent, [and] applied for adaptive management’ approaches; and thirdly moving from non-strategic to targeted and evidence-based investment.<sup>1048</sup>

The role of the strategy was:

to provide a clear and coherent framework within which all governments can align and prioritise their current and future policies and programs, and to provide an effective mechanism for aligning those efforts.<sup>1049</sup>

The strategy would also ‘facilitate progressive alignment between issue-specific national strategies’ including the Strategy for Australia’s National Reserve System 2009–2030.<sup>1050</sup>

This time measurable targets were adopted by all, the strategy including 10 interim national targets to be achieved by 2015.<sup>1051</sup> Two examples will suffice to give a sense of these: first, to restore 1000 km<sup>2</sup> of fragmented landscapes and aquatic systems to improve ecological connectivity, and secondly to establish a national long-term biodiversity monitoring and reporting system.<sup>1052</sup> However, this specificity was limited to the 10 national targets. The

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<sup>1046</sup> 2010 Strategy, above n 897, 32.

<sup>1047</sup> Ibid 32.

<sup>1048</sup> Ibid 33.

<sup>1049</sup> Natural Resource Management Standing Committee, ‘Review of the National Strategy for the Conservation of Australia’s Biological Diversity’, Agenda Paper 5.2, Meeting 18, 25 September 2009 (Department of the Environment, Water, Heritage and the Arts file 2010/00431) 3.

<sup>1050</sup> Ibid.

<sup>1051</sup> 2010 Strategy, above n 897, 13–14.

<sup>1052</sup> Ibid 10.

remaining 26 actions, although associated with outcomes, are general and not time-specific. For example, action A15 is to 'incorporate biodiversity conservation into land and fire management planning', while action A25 is to 'progressively align and integrate reporting products across governments for effective biodiversity planning'.<sup>1053</sup>

On monitoring and reporting progress, the strategy went on to make the claim that for the strategy to make a real difference, progress needed to be tracked through robust, integrated and regular monitoring, with changes made when evidence suggests current approaches are ineffective. However, reflecting the weakness of the executive federalism approach, the only actual requirement was that jurisdictions report to the ministerial council on progress in the second and fourth year of the five-year review cycle; consolidated reports would be published 'so the whole community can follow our national progress'; and biodiversity would receive increased representation within national accounts.<sup>1054</sup>

### 6.5.2 A different logic within government

In contrast to the public message that 'business as usual is no longer an option', Australian Government deliberation had been to the opposite effect. The matter did not go to Cabinet. Rather, the Environment Minister wrote to the Prime Minister, simply advising him that the strategy was 'before [the ministerial council] for endorsement'; consistent with Cabinet rules he did not seek the PM's endorsement because it did not involve any change of policy:

The strategy is primarily intended to better align and integrate existing efforts across jurisdictions by providing an agreed national direction for biodiversity protection and sustainable management over the next 20 years. Accordingly, the strategy provides a mechanism for identifying where there are gaps in critical information and where there are new opportunities for effective collaborations across jurisdictions and with the wider community and with industry ... my Department has undertaken regular consultation with relevant Australian Government departments ... I do not anticipate additional budget pressures arising directly from the strategy.<sup>1055</sup>

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<sup>1053</sup> Ibid 74, 75.

<sup>1054</sup> Ibid 50 (outcome 3.3.1), 64.

<sup>1055</sup> Peter Garrett, Minister for the Environment, Heritage and the Arts, letter of 28 May 2010 to Prime Minister (Department of the Environment, Water, Heritage and the Arts brief B10/482). Cabinet consideration was required if (among other things) the proposal involved a 'significant variation to existing policy' or new expenditure: Australian Government, Department of Prime Minister and Cabinet, *Cabinet Handbook* (6<sup>th</sup> ed 2009), [78].

Having received a reply that he should seek the agreement of relevant ministers because the strategy had potential implications for their portfolios, the minister replied that there were no potential implications for other portfolios because:

As a national framework the revised biodiversity strategy is a non-binding agreement by all governments that aims to better align their existing policies and programs and emerging priorities to address national outcomes and targets. Therefore no jurisdiction is solely responsible for meeting these and each jurisdiction has the flexibility to prioritise their biodiversity management activities with the national strategy. As a consequence, progress against the national outcomes and targets will be determined through the collective but diversified efforts across all governments and the wider community and is not contingent on additional resources.<sup>1056</sup>

In other words, the ‘strategy’ was in reality a non-binding agreement to align policies broadly; it required no additional funds and no jurisdiction was accountable for its implementation. Subsequently (after a change of minister) the environment minister did seek the approval of other relevant ministers. In doing so, the new Minister used the same form of words as his predecessor to describe to his colleagues the (lack of) collective responsibility of jurisdictions.<sup>1057</sup> No doubt suitably reassured, they approved.

When the matter went to the ministerial council, the agenda paper adopted a similar stance in advising ministers that:

15. [The] Strategy will also help identify where existing efforts are insufficient and to ensure that, whenever feasible, jurisdictions work collaboratively to address emerging issues around agreed strategic outcomes. Precisely how this is done will always be determined by the particular priorities and available resources of each government.

...

21. [The] Strategy will be a high-level, direction-setting framework that will guide individual jurisdiction investment in biodiversity conservation. Specific resourcing decisions will be the responsibility of each jurisdiction.<sup>1058</sup>

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<sup>1056</sup> Peter Garrett, Minister for the Environment, Heritage and the Arts, letter of 1 July 2010 to the Cabinet Secretary and Special Minister of State (Department of the Environment, Water, Heritage and the Arts, brief B10/1605), with letters in the similar terms to several other ministers).

<sup>1057</sup> See for example Wayne Swan, Deputy Prime Minister and Treasurer, letter of 28 October 2010 to Tony Burke, Minister for Sustainability, Environment, Water, Population and Communities (Department of Sustainability, Environment, Water, Population and Communities file C10/17752); Tony Burke, Minister for Sustainability, Environment, Water, Population and Communities letter to Wayne Swan, Deputy Prime Minister and Treasurer, (Department of Sustainability, Environment, Water, Population and Communities brief B10/2205) (copy undated).

<sup>1058</sup> Natural Resource Management Ministerial Council, ‘Review of the National Strategy for the Conservation of Australia’s Biological Diversity: The Revised Draft Australia’s Biodiversity Conservation Strategy’, Agenda

Despite the rhetoric of the strategy, governments clearly saw it as a broad political agreement to align high-level policy, not an actual joint plan to achieve certain objectives and targets, a conception similar to the terms used by Griffin NRM to describe the previous strategy.

### 6.5.3 Implementing the 2010 Strategy

Despite the apparent intention of government not to treat the strategy as a vehicle for achieving direct on-ground change, the document said otherwise and is thus considered here according to its terms. As with the 1996 Strategy, the 2010 Strategy contained an implementation chapter but lacked a more detailed implementation plan.<sup>1059</sup> The Ministerial Council foreword had ended with the call to action that:

It is everyone's responsibility to conserve biodiversity. Governments will play a critical role, but unless the whole community works together to take up the challenge, then we are unlikely to stop the decline in biodiversity.<sup>1060</sup>

Elaborating on this, the implementation chapter opened with the statement that '[a]ll of us have a job to do ...'<sup>1061</sup> True to this sentiment, responsibility for 23 of the 26 actions is assigned in terms beginning with 'all', typically 'all governments' and several nominated sectors. For example, action A14, 'Identify and protect climate change refugia to strengthen opportunities for genetic and ecological adaptation' is assigned to 'all governments, science sector, private landowners'.<sup>1062</sup> Of the remaining three actions, one is assigned to the Australian, State and Territory Governments, while only one, a series of surveys on community awareness of biodiversity conservation issues, is assigned to a single actor, the Australian Government, through the ABS.<sup>1063</sup> With this exception, responsibilities are

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Paper, Item 6A, Meeting 16, 5 November 2009 (Environment Department file 2010/00431). Note that there were also subsequent deliberations.

<sup>1059</sup> See 2010 Strategy, above n 897, 'Implementation and action', at 51 et seq. Note that weakness of implementation was identified by an international review, although this review was undertaken while the 2010 Strategy was in consultation-draft form and was published in 2010, so may not have been available to governments before the strategy was finalised: see Christian Prip, Tony Gross, Sam Johnston and Marjan Vierros, *Biodiversity Planning: An Assessment of National Biodiversity Strategies and Action Plans* (United Nations University 2010) 119.

<sup>1060</sup> 2010 Strategy, above n 897, 4.

<sup>1061</sup> Ibid 53. See also Appendix 1 'Roles and responsibilities for implementing the Strategy', which contained a general description of various roles, ranging from the general community, through various sectors and bodies, to the three tiers of government.

<sup>1062</sup> Ibid 57.

<sup>1063</sup> Ibid 61, Action A21.

diffuse, although in many cases it is obvious from the nature of the action that governments would need to take the lead. Other than for the 10 national targets, there are no timelines. In respect of those, the action and timeline may be clear but there have been no progress reports, despite the commitment to publish consolidated reports.

### *Early Reviews of Progress*

The early signs for implementation were not good. In its report to COAG for 2012–2013, the standing committee of Commonwealth and State officials supporting the ministerial council noted that:

while there have been significant advances in many aspects of biodiversity and ecosystem management over the past decade, management approaches and responsibilities remain fragmented across [Australia]. This hampers our ability to address the legacies of past pressures like land clearing, ongoing pressures such as invasive species, and emerging challenges like climate change.<sup>1064</sup>

Once more, it was as if the strategy did not exist, or governments had no ownership of it and so could comment as if they were independent observers.

This assessment can be contrasted with Australia's fifth national report to the Biodiversity Convention in 2014, which presents a much more upbeat picture of significant and coordinated effort yielding 'good progress' towards 'some but not all' of the ten targets, while also acknowledging an overall lack of progress in halting biodiversity loss.<sup>1065</sup> On closer analysis however, the substance of the report is that although numerous actions can be connected to the goal of the Biodiversity Convention, many are small and most were existing, not stimulated by the 2010 Strategy. The narrative was that, overall, biodiversity continued to decline; its significance to human society was not well-understood, and poorly measured.

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<sup>1064</sup> Standing Committee on Environment and Water, 'Report to the Council of Australian Governments (for the year 2012–2013)', (Attachment to 'Draft Annual Status Report to the Council of Australian Governments (COAG) on 2012–13 Work Plan', Out of Session 2013 Item 6.2; approval noted in Minutes of Senior Officials Committee, 7 November 2013 Item 1.4, 'SOC Out of Session Decisions', (Department of Sustainability, Environment, Water, Population and Communities file 2013/8157).

<sup>1065</sup> Australian Government, Department of the Environment, 'Australia's Fifth National Report to the Convention on Biological Diversity' (Department of the Environment, May 2014).

The report takes the form of responses to 12 questions in a reporting template. Nine of those relate to the identification of problems and actions taken in response (ie inputs), rather than to the outcomes of actions taken. Question nine concerns the extent to which the national strategy has been implemented; the report avoids the question for the most part by referring to the forthcoming five-year review.<sup>1066</sup> In response to question 10, concerning progress towards the Aichi targets, the report includes a detailed reconciliation between the national strategy and the international plan in tabular form.<sup>1067</sup> However, most of the information included as 'indicators of progress' is generally descriptive of programs such as Landcare, or contains statistics on inputs, for example that 293 schools were participating in the 'Reef Guardian Schools Initiative'.<sup>1068</sup> There are no items suggesting that the strategy initiated new actions which addressed the problem of biodiversity decline in a forecast, measurable and measured way. That is, none took the form of a chosen means, implemented successfully, to achieve a designated goal selected on the basis of its relevance to solving the problem of biodiversity decline. The action closest to this form is the report that as of 30 June 2013 36.2% of Australia's marine environment and 16.52% of Australia's terrestrial and inland waters were conserved under the National Reserve System.<sup>1069</sup> Despite statistics such as this, in response to question four on the impacts of changes in biodiversity for ecosystem services and the implications of those impacts, the report cited the finding of the SoE Report 2011 concerning lack of knowledge and understanding of the relationship biodiversity and ecosystem functions.<sup>1070</sup>

#### 6.5.4 First Five-Year Review 2015

A scheduled review of the 2010 Strategy was undertaken in 2015 and published in 2016.<sup>1071</sup> The review was internal, led by officials, but with independent expert advice. Public submissions were taken.

The 2015 Review found, in essence, that there had been significant activity contributing to the outcomes of the strategy, but that this had not been 'directly driven' by the strategy itself.<sup>1072</sup> Factors contributing to this conclusion were summarised as including governance,

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<sup>1066</sup> Ibid 49.

<sup>1067</sup> Ibid 48–70.

<sup>1068</sup> Ibid 48, 49.

<sup>1069</sup> Ibid 55, 62.

<sup>1070</sup> Ibid 25.

<sup>1071</sup> Biodiversity Working Group, *Report on the Review of the first five years of Australia's Biodiversity Conservation Strategy 2010–2030* (Commonwealth of Australia 2016) ('2015 Review').

<sup>1072</sup> Ibid 7.



reporting and institutional frameworks; lack of ability to facilitate increased social engagement; and weaknesses in strategy design for prioritising and coordinating actions.<sup>1073</sup> In considering these factors in more detail, the reviewers pointed to what might be described as ‘technical’ grounds internal to the strategy itself: lack of clarity; inadequate guidance on investment-targeting; a perceived disproportionate focus on protection and restoration of terrestrial natural environments, to the detriment of urban, production and marine environments; and inadequate alignment with SoE reporting domestically and the Biodiversity Convention Strategic Plan internationally.<sup>1074</sup>

More significantly and less easily rectified, the review pointed to a failure to address sustainability considerations, along with poor governance, the lack of an implementation plan and unrealistic (and therefore unimplemented) national monitoring and reporting arrangements.<sup>1075</sup> The most significant of these for present purpose relates to sustainability and the need for trade-offs. Domestically, the review argued that:

[w]hile there are opportunities for complementary outcomes, in some cases decision makers will choose not to fully mitigate or offset impacts to nature. The Strategy could help explain the need for governments to consider compromises and balances when planning outcomes for biodiversity. Providing a framework for, and clear explanation of, the trade-offs which occur between biodiversity and other interests, and their short and long term costs and benefits, will help inform community preferences and influence the decisions of government.<sup>1076</sup>

It then went on to argue that one response that could be explored was ‘valuation of biodiversity and ecosystem services in economic terms’, as ‘[r]obust valuation of ecosystem services and environmental accounting can further strengthen market and non-market policy tools ...’<sup>1077</sup> This was of course one of the ESD principles originally adopted in the IGAE in 1992 and a required consideration under the *EPBC Act* (among others) since 1999.

Another key finding was that:

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<sup>1073</sup> Ibid 1.

<sup>1074</sup> Ibid 11, 13, 14, 16, 35–36, 45–47, 48.

<sup>1075</sup> Ibid 12, 14–15, 23, 25, 37, 39, 47–48.

<sup>1076</sup> Ibid 12.

<sup>1077</sup> Ibid 12–13

In the absence of a framework that can monitor and report on the full suite of activities that have contributed to achieving the objectives of the Strategy, its success and progress will continue to be difficult to demonstrate.<sup>1078</sup>

It is not surprising that such criticisms are muted. Although the review was supported by independent experts (at least one a former author of the strategy!) the reviewers are both reviewing their own (or their predecessors') work and the decisions of their ministers (or predecessors). More obvious failings, such as a lack of resourcing for, or political commitment to, the strategy are ignored. In releasing the Review, ministers appeared to imply that a lack of progress could be attributed, not to under-resourcing by governments, but to a failure of previous governments to develop a collaborative approach with the various sectors of civil society, one that would allow government resourcing to be 'leveraged':

As the strategy supports our implementation of the ... Convention on Biological Diversity, Ministers agreed that it should be updated to meet current and emerging challenges. Ministers highlighted the importance of reform of the strategy to enhance collaboration with Indigenous people, private landowners, businesses, environmental organisations, and communities to achieve tangible on-the-ground improvements for our species and recognised the importance of bringing the broader community along with this reform. This will mean leveraging the resources and effort of government and focusing that effort on a set of shared priorities to ensure there is robust protection of Australia's globally important species and landscapes. Ministers agreed that closer cooperation across Australia, guided by a national plan, will lead to better outcomes.<sup>1079</sup>

Note also that this statement is framed primarily in terms of implementing the Biodiversity Convention rather than domestic policy commitments.

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<sup>1078</sup> Ibid 7.

<sup>1079</sup> Meeting of Environment Ministers, *Agreed Statement*, 25 November 2016, <<http://www.environment.gov.au/system/files/pages/4f59b654-53aa-43df-b9d1-b21f9caa500c/files/mem-meeting5-statement.pdf>> (viewed 30 December 2016).

## 6.6 Australia's Strategy for Nature 2018–2030: Australia's Biodiversity Conservation Strategy and Action Inventory (Draft)

In 2017 environment ministers, responding to the 2015 Review, released for public comment a draft of a new strategy, Australia's Strategy for Nature 2018–2030: Australia's Biodiversity Conservation Strategy and Action Inventory (Draft 2018 Strategy).<sup>1080</sup> Consistent with the earlier response of ministers to the 2015 Review, the Draft 2018 Strategy is presented as a 'shared roadmap', identifying goals and objectives to 'guide the collective efforts of governments and other sectors'.<sup>1081</sup> Rather than provide for implementation by assigning actions to governments, the draft provides for an 'action inventory' in which governments could 'showcase how each government is delivering on-ground action against the goals and objectives'.<sup>1082</sup> The rationale for this approach, which breaks the traditional 'ends-means' nexus for policy, appears from the extracts in Box 6.5 to favour a leaderless model in which governments simply constitute one among several groups of actors in society contributing to a collective responsibility to care for nature. Their contribution in this instance is to produce a model approach and collate information about voluntary responses to the model. In effect, the approach of the Draft 2018 Strategy to complaints of poor implementation is to make not only implementation, but even reporting of implementation, entirely optional.<sup>1083</sup>

**Australia's strategy for nature 2018–2030**  
***Australia's Biodiversity Conservation Strategy and Action Inventory***  
***DRAFT***

...

**How will we get there?**

**Our Approach**

Caring for nature is the shared responsibility of all Australians. The aspirations described in this strategy will only be achieved through the joint efforts of governments, communities and individuals.

...

<sup>1080</sup> Biodiversity Working Group, 'Draft 2018 Strategy', above n 897. The meetings of Commonwealth and State environment ministers are no longer styled as a 'Council' but styled simply as a 'Meeting of Ministers'.

<sup>1081</sup> Ibid 7.

<sup>1082</sup> Ibid 17.

<sup>1083</sup> Perhaps sensing that this component of the proposal may be criticised as a radical departure from the norm, the draft includes a disclaimer, which states that: 'The concept of an action inventory has been designed to help governments illustrate both individual and collaborative efforts which contribute to the strategy's goals and objectives. It is a concept for testing and discussion ...': Ibid, 1.

... Australians are invited to commit to do their part to achieve these goals and to share in the success of their efforts.

### Supporting Principles

...

### From Policy to Action

... The concept of an action inventory has been designed to help governments illustrate both individual and collaborative efforts ...

...

Actions may be individual, shared or initiatives requiring all governments to come together.

### Box 6.5 Extracts from Australia's Strategy for Nature 2018–2030: Australia's Biodiversity Conservation Strategy and Action Inventory (Draft)<sup>1084</sup>

## 6.7 Analysis of the Biodiversity Strategy as Implementing ESD

At a national level, the 'headlines' in the most recent SoE Report most relevant to biodiversity were that:

The main pressures affecting the Australian environment today are the same as in 2011: climate change, land-use change, habitat fragmentation and degradation, and invasive species. There is no indication that these have decreased overall since 2011.

...

Australia's biodiversity is continuing to decline (with some exceptions noted in SoE 2016 thematic reports), and new approaches are needed to prevent accelerating decline in many species.<sup>1085</sup>

Although it is impossible to construct a counter-factual case, the available evidence suggests that the National Biodiversity Strategy has had no discernible impact at a continental scale. This is consistent not only with these headlines but with the studies conducted by Lefroy et al and discussed in 6.2.

The test posed in opening this chapter was whether the biodiversity strategy was coherent on the basis of two criteria: first, whether its goal was clearly defined and supported by actions that were consistent with advancing the goal individually and achieving it

<sup>1084</sup> Ibid 16–17.

<sup>1085</sup> Jackson et al, SoE Report 2016, above n 38, x ('Headlines').

collectively; and second, whether those actions were, in their policy context, feasible of achievement through the allocation of resources and other means of implementation. This section argues that those criteria were not met and seeks to identify the reasons for this.

### **6.7.1 Clarity of Goals, Consistency of Actions and Feasibility of Achievement**

There is no doubt that twin goals of the 1995 Strategy, of implementing the Biodiversity Convention and advancing ESD were clear, and the strategy coherent, above the level of implementation. The goals of the 2010 Strategy were similarly clear. Although the 2010 Strategy removed reference to ESD, the policy direction of the two strategies remained broadly consistent because the strong linkages in the Biodiversity Convention between biodiversity and sustainability largely compensate for the absence of an articulation of ESD in the 2010 Strategy. Both strategies however lost their coherence below that level because there was little serious attempt at dealing with the substance of implementation, as discussed below.

#### *Weak Implementation Generally*

The implementation failures of the National Biodiversity Strategy are obvious in many respects and do not fall far short of a simple failure to make any serious implementation effort. The implementation sections of the strategies neither included nor called for an action plan. As a result, basic detail such as how an action would be implemented or who (other than in some instances ‘all governments’) would take responsibility for the action, were absent. Even where a clear end-date was nominated, as with both strategies and the National Objectives, the lack of implementation detail left these dates looking arbitrary and more like wishful thinking than a serious attempt to plan implementation. Coordination was also weak, due significantly to federal issues (see below). While the basic nature of these failings might suggest that the overall reasons for failure are obvious, several aspects of implementation warrant more detailed discussion.

#### *Poor Monitoring and Review*

The need for a comprehensive approach to biodiversity information, including elements such as a national biodiversity assessment and inventory; a national long-term monitoring system; and the development of performance measures and modelling tools; has been an element of the National Biodiversity Strategy from the outset. Equally, the failure to

achieve significant progress in this area has been this has been a feature of each five-year review, including OECD reviews, SoE reports and several internal and consultant-led reviews. The most recent SoE Report found that:

Although a key objective of Australia's Biodiversity Conservation Strategy 2010–2030 is to 'by 2015, establish a national long-term biodiversity monitoring and reporting system', this has not been completed. The Australian Government has made some progress in the past 5 years in seeking to establish formal monitoring programs as a fundamental component of several of its large-scale, long-term environmental initiatives, but these are a collection of discrete activities and, when compiled, fall well short of a comprehensive national system.<sup>1086</sup>

Not only has funding for monitoring been limited, but when provided, it has been withdrawn. The major example of this is the NLWRA, discussed in chapter five. Among other things, this program developed baselines that were not maintained. The most recent example is the Long Term Ecological Research Network of some 500 plots, which received funding in 2012 that was withdrawn in 2017.<sup>1087</sup> At the same time, governments continue to acknowledge the absence of a substantial approach to information in each national report under the Biodiversity Convention and to include objectives for monitoring in new iterations of the strategy. This pattern is continued in the most recent iteration, the 2018 Draft Strategy, although with the qualification that the objective is now cast more in the abstract, consistent with the general approach of the draft which is to avoid government commitments and share responsibility across society:

Objective 10: Increase knowledge about nature to make better decisions

There are opportunities to target research to reduce gaps in knowledge and improve management strategies, to support development and implementation of innovative tools and techniques, and to build connections between the environmental disciplines and social sciences. Enhanced knowledge about nature could be supported through a concerted and sustained effort across all levels of government, and improved partnerships with community groups and business.<sup>1088</sup>

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<sup>1086</sup> Jackson et al, SoE Report 2016, above n 38, 42–43.

<sup>1087</sup> John Pickrell, 'Australia to ax support for long-term ecology sites', *Science*, 11 August 2017, <<http://www.sciencemag.org/news/2017/08/australia-ax-support-long-term-ecology-sites>> (viewed 28 April 2018).

<sup>1088</sup> Draft 2018 Strategy, above n 897, 15.

With comprehensive information repeatedly acknowledged as vital, the repeated failure of governments to implement their commitments in this respect suggests that they are not serious in their policy intent.

#### *Under-Investment and Lack of Compulsion*

The Commonwealth did not fund the National Biodiversity Strategy significantly through new or reallocated resources at any point. It is possible that guidelines for various existing programs may have made relevance to the strategy a consideration in eligibility for grant funding, although even if this had occurred it would only have been one among many factors. While an examination of each state's budget documentation is beyond scope, there is nothing in national reporting to suggest that the approach of the states was any different. Even without modifications to funding guidelines, various Commonwealth and State programs no doubt contributed incidentally to actions under the strategy, but this is hardly the point. The Biodiversity Strategy was essentially unfunded. The Commonwealth did make provision for bioregional planning in its new EPBC Bill, acknowledging the link to the strategy in doing so but, chapter seven will argue that this provision was weak and in any event used only on a very limited basis in the ensuing decades.<sup>1089</sup>

#### *Consequences of Inadequate Provision for Implementation*

With little provision for implementation, the actions in the Biodiversity Strategy were there only for guidance, not compliance; the means to the agreed ends were identified but there was no obligation to adopt them and no resources, new or existing, dedicated to their implementation. While the actions were sufficiently detailed that determined governments might have implemented them and achieved the articulated objectives, this does not make the strategies themselves coherent. This is particularly the case with the 2017 Draft Strategy, which effectively the ends-means connection between goals and actions, as it does not even make a pretence of providing for implementation. Rather, the paradigm there is simply one of defining desired ends and collating information on any actions that advance those ends, among other reasons to assist in demonstrate compliance with the Biodiversity Convention.<sup>1090</sup>

### **6.7.2 Other Reasons for Failure of the Strategy**

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<sup>1089</sup> See 7.3.3.

<sup>1090</sup> Australian Government, Draft 2018 Strategy, above n 897, 17.

Beyond the implementation weaknesses of the Biodiversity Strategy, this section considers some less obvious reasons why the strategies were a policy failure. Together these suggest the importance, not only of detailed deliberation at the outset, but also of review and revision if policy and strategy is to remain relevant and effective.

### *Flawed Initial Decision-Making*

It was quite clear by 1993, and accepted in international instruments including the Rio Declaration and the Biodiversity Convention, that the long-term status of biodiversity was connected integrally with economic activity. Australia recognised this in seeking to include an article in the Biodiversity Convention requiring countries to review policies with a view to internalising biodiversity-related externalities and ensuring policy integration more broadly (ie Policy Tier 3). At that point the advice to Cabinet in recommending that Australia sign the convention was that Australia was the only developed country among the dozen countries containing most of the world's biodiversity, that it had the potential to benefit from the conservation and sustainable use of its biological resources and that it was well-placed to implement the convention's obligations through existing programs.<sup>1091</sup> Moreover, it also argued that 'without global cooperation biodiversity will continue its current rate of rapid decline in areas beyond our jurisdiction ... [and] will ultimately impact on Australia.'<sup>1092</sup> The sense was that action really had to be taken (admittedly mostly elsewhere).

Having failed in its objective to have the Biodiversity Convention require that countries review domestic policies with policy ambition at Policy Tier 3, securing only a bland obligation to adopt incentives for conservation and sustainable use, Australia fell into policy amnesia. To propose, as the Environment Minister did the following year, that government could adopt a biodiversity strategy in the absence of economic analysis and on the unsubstantiated claim that there would be few or even no budgetary implications, when substantive action on biodiversity was likely to have both major economic implications, such as requiring major reductions in land clearing, and also significant budgetary implications associated with institutionalisation and possibly also structural adjustment, certainly represented poor policy development. It may have been worse than this. Although

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<sup>1091</sup> Australian Government, Cabinet Submission 322, above n 938, 3.

<sup>1092</sup> Ibid.



there is no direct evidence, the Environment Minister may have been avoiding hard analysis on the political calculation that Cabinet was unlikely to agree to a policy with substantial distributional and budgetary implications, while abandoning the initiative would leave Australia without the strategy it would need under the Biodiversity Convention and reflect most heavily on the environment minister. The result, whether intended or not, was to commit government to appearing to act, by adopting the simulacrum or *facade* of a strategy. The implication was not simply the likelihood of future policy failure through poor on-ground outcomes. It was that this course, once embarked upon, would be even more difficult for subsequent governments to resile from than at the outset, because a later significant change of approach would involve at least an implicit admission of a breach of public trust. Policy failure was locked-in to a significant degree by the politics. As with the ESD Process, the Commonwealth did not count the cost of the commitment at the outset and then later avoided counting the cost by adopting a near cost-free approach.

The decision-making process for the 2010 Strategy is consistent with this hypothesis. Even though by this time the failures of the 1996 Strategy were clear, the environment minister sought to avoid not just a cabinet process, but even consultation with other ministers, on the ground that the new strategy had no policy implications. Although the record does not reveal the minister's thinking beyond this 'no implications' argument to the Prime Minister, it is reasonable to hypothesise that the minister found himself in an invidious position, unlikely to secure Cabinet support for a strategy that would have reasonable prospects of achieving its goals yet unable to abandon having the facade of a strategy because of the need to comply with the Biodiversity Convention (and to avoid a loss of credibility). The middle course adopted by the minister, of pressuring the states (successfully) to include clear and measurable targets, was perhaps a reasonable option politically, but without federal leadership in the form of investment or compulsion, the result in policy terms was merely to make the facade a little more grand.

#### *Failure to Address Federal Issues and Federal Structures Ill-Adapted to Implementation*

It was the Commonwealth that drove the biodiversity policy commitments both nationally and internationally. The unilateral nature of the national commitment was discussed in chapter three. Internationally, while the States were represented in Australia's delegation negotiating the Biodiversity Convention, and while the IGAE provided for the Environment Ministerial Council to advise COAG on implementation prior to ratification, this process risked leaving difficult decisions on legislative change, funding commitments

and the division of responsibilities to a stage in the process where it might be, in practical terms, impossible to agree on implementation but too difficult to resile from commitments. The result of this course was largely the Commonwealth that shaped policy and strategy while the States were largely responsible for implementing the outcomes. In the absence of intention by the Commonwealth to test the limits of its legislative power by pushing into areas that were hitherto State responsibilities, or to shoulder the cost of substantive action (or both), this mismatch of roles and responsibilities gave the Commonwealth incentives to be expansive in driving commitments and the States incentives to avoid fulsome implementation of commitments for which it would attract limited kudos and for which it could probably avoid accountability. These misaligned incentives combined to produce the policies such as the Biodiversity Strategy and indeed the NSESD, which are long on commitment and short on action. While the IGAE addressed this problem in part by providing for improved coordination, it did not resolve the underlying misalignment, which remains unaddressed.

This misalignment did not just operate when the Biodiversity Strategy was first formulated, but can also be seen at two later points, when Commonwealth ministers pressured States to agree to specific objectives and targets which would then fall largely on them to implement. On the first occasion in early 2000s, the Commonwealth sought to use funding agreements under the National Heritage Trust to give progress the National Objectives, without measurable success. On the second occasion, there was no apparent follow-through by the Commonwealth — the States were left to implement a commitment driven by the Commonwealth, but took little if any measurable action.

Federal issues also contributed to weak implementation, which was often assigned to ministerial councils, giving rise to the same problems of executive federalism as have been discussed in chapter five. That arrangements were ill-adapted to support implementation of national strategies can be seen in the attempts of a small group of senior officials, the Executive Group, to secure implementation of the 1995 Strategy. Equipped with no more than the power to remind and cajole, officials fell back on simple reporting, while jurisdictions, lacking the means to undertake various actions specified in the Biodiversity Strategy, simply defaulted to nominating various actions under existing programs as contributing to its implementation. In the understated bureaucratic words of the 2015 review, the strategy was not a 'strong driver' of actions that advanced the strategy. The

remedy adopted by the 2018 Draft Strategy is to legitimise this! If adopted, this would replace the ‘ends and means’ paradigm with one of ‘ends and contributions’.

### *Failure to Respond Appropriately to Policy Review*

Despite the failure of the Biodiversity Strategy to achieve measurable improvements, occurring against a backdrop of continuing biodiversity decline, governments have not responded by intensifying their efforts. Rather, in public policy terms the pattern has been that the loop of the ‘policy cycle’ is never closed. Monitoring and review findings do not feed back into policy improvements. Finding implementation poor and difficult to measure, governments jump back to the beginning of the cycle and formulate the strategy afresh, as if the problems of biodiversity were newly identified. Such an approach is only possible for two reasons. First, fragmentation of responsibility under weak federal institutional arrangements means that failings cannot be sheeted home to particular governments. Second, the low profile of the strategy, in part due to executive federalism, together with much-reduced levels of public concern since the peaks of the late 1980s and early 1990s mean that scrutiny is low. This is consistent with Downs’ issue-attention cycle, which suggests that public concern about environmental issues rises quickly, generating both alarm and enthusiasm for solving the problem, but then declines gradually as the public realises that solutions involve high costs or even the fundamental reordering of society.<sup>1093</sup>

### *A Shift in Objectives*

Consistent with a hypothesis of gradually declining public concern in the face of difficult choices, a key theme of biodiversity policy has been a progressive lowering of policy ambition, initially through weak implementation and review and more recently by moving from goals of sustainability and biodiversity conservation, consistent with the substance of Australia’s international obligations, to an objective of mere formal compliance with the international obligation to have a national biodiversity strategy. The course of this change is traced in the following paragraph from a general departmental briefing to the Minister’s Chief of Staff in 2007:

#### **Australian engagement and general approach**

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<sup>1093</sup> Anthony Downs, ‘Up and down with ecology — the “issue-attention cycle”’ (1972) 28 Public Interest 38.

The generic nature of commitments under the Convention makes it difficult to assess direct benefits accruing to Australia from its Party status. In earlier years the Convention was a useful benchmark for development of Australia's domestic environmental legislation, policy and programs. Australia's National Biodiversity Strategy and Action Plan is, however, a direct product of the Convention (Article 6) and it continues to inform national policy on biodiversity ... The Convention also continues to provide value, as guidance, as Australia works towards a fully integrated natural resources and environment management regime, notwithstanding the fact that Australia's domestic environmental protection and biodiversity conservation legislation, policies and programs generally meet or exceed implementation obligations under the Convention.<sup>1094</sup>

This objective of formal compliance only is now apparent in the Draft 2018 Strategy, which is so minimalist in its 'aspirations and options' paradigm and a narrative that talks of governments 'showcasing' and 'illustrating' their policies that little function remains for the strategy other than to meet the international obligation to have one.

### **6.7.3 Conclusions on the National Biodiversity Strategy**

It appears from this analysis that governments would not, rather than could not, come to grips with biodiversity conservation as a major pathway to ESD. In many respects the story is similar to that of the ESD Process and the NSESD, one of high and genuine initial interest, followed by a hollowing out of policy and a slow lowering of policy ambition, in this case to maintaining international and domestic respectability. The implications of this for ESD generally, and possible responses in the face of ongoing biodiversity decline, are discussed in the final chapter.

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<sup>1094</sup> Department of the Environment and Water Resources, Assistant Secretary, Biodiversity Conservation Branch, 'UN Convention on Biological Diversity Australia's Priorities 2007–2008', (Submission 07/1317 to [Minister's] Chief of Staff, 13 June 2007) 4.

## CHAPTER SEVEN

### APPLYING ECOLOGICALLY SUSTAINABLE DEVELOPMENT THROUGH ENVIRONMENTAL IMPACT ASSESSMENT UNDER THE *ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999*

*The grand strategy must be converted into action.*

Preston CJ, NSW Land and Environment Court<sup>1095</sup>

The Bill for the *EPBC Act* was, as its sponsoring minister claimed, ‘perhaps the most important proposed legislation dealing with environmental issues that will have been presented to the Commonwealth Parliament.’<sup>1096</sup> Introduced by a government of the political right, its potential to protect and conserve the environment was sufficiently high to secure passage with the support, after the negotiation of some 540 amendments, of the Australian Democrats (‘Democrats’), a minor Parliamentary party of the political centre seen as pro-environmental, as well as the support of several significant environment groups, including WWF.<sup>1097</sup>

The Act has ten chapters (originally eight), of which three are of interest here. Chapter One, dealing with preliminary matters, sets out the objects of the Act, including those related to the promotion of ESD. Chapter Four contains an environmental impact assessment and approval scheme (‘the EIA scheme’), which among other things requires decision-makers to take the principles of ESD into account when deciding whether to

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<sup>1095</sup> *Hub Action Group Inc v Minister for Planning* (2008) 161 LGERA 136, 141.

<sup>1096</sup> Robert Hill, Senate, *Parliamentary Debates*, 4795, 2 July 1999 (Second Reading speech).

<sup>1097</sup> John Warhurst, ‘Democrats, Australian’ in *Oxford Companion to Australian Politics* (Oxford University Press, 2007) <<http://www.oxfordreference.com/view/10.1093/acref/9780195555431.001.0001/acref-9780195555431-e-102>> (viewed 7 May 2018); for a discussion of the outcomes of the negotiated amendments (from the perspective of one environmental organisation) see John Connor, ‘Australia’s new environment laws: questions and answers’ (1999) 27(4) *Habitat Australia* 8–9.

approve development projects that have been assessed under the scheme. Chapter Five deals with the conservation of biodiversity and heritage, including through provision of various conservation plans and agreements. In fact, the Act has a particular focus on biodiversity, not only through chapter five but also because a number of the 'matters of national environmental significance' (MNES) that are protected by the Act, thus attracting the operation of the EIA scheme, are either inherently biodiversity-related or, in the case of heritage places, often have substantial biodiversity values.<sup>1098</sup>

It is the operation of the EIA scheme and in particular the way in which it both addresses ESD and interacts with the legal framework for biodiversity and conservation planning, that is the subject of the case study in this chapter. In seeking to shed light on this interaction, the case study includes the policy and legislative history of the Act. Broadly, the operation of the Act as relevant to the case study is apparent in the extracts in Box 7.1 from the Environment Minister's second reading speech on introducing the legislation. The Natural Heritage Trust referred to by the Minister as being complemented by the legislation was the then-government's major investment program for environmental restoration and conservation.<sup>1099</sup>

**Senate Hansard Thursday 2 July 1998**

**Senator HILL** (SA — Environment) (6:09pm) — I move:

That this bill now be read a second time.

...

The bill will promote, not impede, ecologically sustainable development and will conserve biodiversity.

...

The decision whether to grant approval [of proposed developments] is made after considering social and economic factors as well as the matters of national environmental significance.

Other features of the new process include express recognition of the precautionary principle and the other principles of ecologically sustainable development ...

...

The loss of biodiversity represents the greatest environmental challenge facing Australia. The ... government has demonstrated its commitment to addressing this challenge by establishing the largest environmental program in Australia's history ... The bill now

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<sup>1098</sup> See Part 3, *EPBC Act*. For example, the Act protects listed threatened species and communities or migratory species. It also protects World Heritage places, many of which have major biodiversity values.

<sup>1099</sup> The scheme involved the establishment of a statutory fund: see *Natural Heritage Trust of Australia Act 1997* (Cth).

provides a substantially improved legal framework for the conservation and sustainable use of Australia's biodiversity to complement the Natural Heritage Trust.

**Box 7.1 Extracts from Minister's Second Reading Speech on Introducing the EPBC Bill 1999<sup>1100</sup>**

## 7.1 Preliminary Matters

The common practice of requiring major development projects to secure approval under an EIA scheme provides a major vehicle to advance environmental policy goals such as ESD. Typically such schemes involve the screening of development projects to identify those that are likely to have significant impacts; the assessment of environmental impacts of those projects, using an assessment approach appropriate to the nature and scale of likely impacts; and a subsequent decision, based on assessed impacts, on whether to approve or prohibit the development, or allow it to proceed subject to conditions intended to avoid, mitigate or offset adverse impacts. The generic terms environmental impact statement (EIS) and environmental impact assessment (EIA) are used here for the assessment documentation and overall assessment process, as the various levels of assessment are not relevant here. In a similar vein, decisions under an EIA scheme are 'approval decisions', even though the decision may be not to approve the project. In a policy regime built around a social goal of ESD (Policy Tier 5.3), the logical policy objective of an EIA scheme will be to identify and protect ecological function and biodiversity (abbreviated to 'ecological function'), through assessment and approval decisions.

The literature discussed below reveals two approaches to ensuring that EIA schemes achieve their policy objectives. The first is to ensure that environmental assessment occurs within an environmental policy or planning context ('spatial planning model'). This allows ecological constraints on development to be identified in advance, in geospatial terms, and for those decisions then to be made by reference to those constraints. The second approach involves using policy goals and objectives to derive decision rules, which then constrain what can be approved ('decision rules model').

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<sup>1100</sup> Commonwealth, *Parliamentary Debates*, Senate, 2 July 1999, 4795, 4798 (Robert Hill, Second Reading Speech).

In Australia, governments took collective decisions in the early 1990s to adopt the bioregional planning approach in national policy concerning EIA schemes.<sup>1101</sup> This chapter argues that this decision was then partially ignored or forgotten by the Commonwealth, but later revived in weak form through provision for various plans under the *EPBC Act*. The Act also includes a weak version of the decision rules model, based on considering ESD principles. Thus the Commonwealth pursued both major approaches to implementing environmental policy through EIA schemes, fully implementing neither, although as enacted each model is capable of doing so in certain circumstances. This is a significant factor in explaining why ESD has been a policy failure in Australia.

### *Several Issues of Scope and Approach*

Typically, EIA schemes deal with the approval of *individual* assessment and approval of development projects (project-based assessment). The Act also provides for the approval of classes of project, following the strategic environmental assessment (SEA) of a 'policy, plan or program' under which development can occur.<sup>1102</sup> Although the use of SEA has increased in recent years, this chapter considers only project-based assessment, for reasons of scope but also because it remains the standard approach in Australia.<sup>1103</sup> As a general observation however, SEA offers a significant improvement in decision-making, in terms of promoting ESD, through consideration of cumulative impacts. Indeed, as with some other instruments, strategic assessments under the *EPBC Act* are capable of fully implementing the spatial planning model, *provided* the policy, plan or program which is assessed provides comprehensively for the conservation of ecological integrity. However, under the *EPBC Act*, the minimum requirement for such an instrument to be assessed is only that it provides sufficient information to allow for assessment of the impacts of proposed actions.<sup>1104</sup> At this minimum level, the approval process would be no more than a scaled-up version of project-based EIA, as the decision-making process following assessment, under which the principles of ESD are no more than mandatory considerations, parallels that for project-based assessment.<sup>1105</sup> Thus, the potential of SEA

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<sup>1101</sup> See 6.3.2.

<sup>1102</sup> See *EPBC Act* Chapter 4, Part 10, especially s 146.

<sup>1103</sup> Mandy Elliott and Ian Thompson, *Environmental Impact Assessment in Australia: Theory and Practice* (5<sup>th</sup> ed, Federation Press, 2009) noted (at 72) that there was little SEA being undertaken in Australia. Although SEA has increased since then, it remains limited in extent: at national level, see the assessments listed at <<http://www.environment.gov.au/protection/assessments/strategic>> (viewed 14 June 2018).

<sup>1104</sup> This is the effect of s 146 of the *EPBC Act* in providing for strategic assessments of policies, plans or programs.

<sup>1105</sup> The structure of s 146F, dealing with general considerations in decisions based on SEA, follows the structure of s 136, dealing with general considerations in decisions based on EIA.



to promote ESD depends on the extent to which SEA is used and the scope and content of the instrument assessed.

Because this chapter is concerned with the extent to which the *EPBC Act* promotes ESD through the EIA scheme, rather than with the broader operational success of the Act, limitations and criticisms of its structure and administration not related to ESD can be put to one side after noting them briefly. In this regard, a key limitation of the Act is that it is confined in scope to ‘matters of national environmental significance’ (MNES), for example protecting some but not all aspects of biodiversity. For current purposes, except where raised expressly, it will be sufficient if the EIA scheme is effective in protecting ecological integrity and biodiversity within that scope.<sup>1106</sup> Similarly, criticisms that the threshold ‘significant impact’ test has been poorly designed and administered, allowing high-impact developments to escape the regulatory net, and that the Act has generally been under-resourced and under-enforced, are beyond scope.<sup>1107</sup> Rather, the question here is whether a development project, properly referred and assessed under the EIA scheme, is capable of being assessed on the basis of whether it advances the goal of ESD, whether by reference to a plan made or recognised under the Act or to decision rules that include the principles of ESD.

## 7.2 Literature on ESD and Environmental Impact Assessment Schemes

This section considers the literature on the implementation of sustainability goals through EIA schemes, first the general international literature and then the Australian literature, whether specific to the EPBC Act or relevant because it addresses features common to Australian EIA schemes.

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<sup>1106</sup> The MNES are found in the *EPBC Act*, Part 3, Div 1. Macintosh for example has argued that the limited scope of the Act is a significant weakness: see Andrew Macintosh, ‘The Environment Protection and Biodiversity Conservation Act 1999 (Cth): An evaluation of its cost-effectiveness’ above n 83. Other criticisms not discussed here include the vagueness of ‘significant impact’ screening test, under-investment in administering the Act and under-enforcement.

<sup>1107</sup> See Macintosh, ‘The Environment Protection and Biodiversity Conservation Act 1999 (Cth): An evaluation of its cost-effectiveness’, above n 83; and Andrew Macintosh, ‘The Australian Government’s Environmental Impact Assessment (EIA) Regime: Using Surveys to Identify Proponent Views on Cost-Effectiveness’ (2010) 28(3) *Impact Assessment and Project Appraisal* 175. See also Lee Godden and Jacqueline Peel, ‘The Environment Protection and Biodiversity Conservation Act 1999 (Cth): Dark Sides of Virtue’ (2007) 31 *Melbourne University Law Review* 106; A Macintosh and D Wilkinson, ‘EPBC Act — The Case for Reform’, (2005) 10(1) *Australian Journal of Natural Resources Law and Policy* 139; Chris McGrath, *Review of the EPBC Act* (paper prepared for the 2006 Australian State of the Environment Committee, Department of the Environment and Heritage, 2006), <<http://www.environment.gov.au/soe/2006/publications/emerging/epbc-act/index.html>> (viewed 10 August 2017) 11.

### 7.2.1 The General Literature

If the aim of an EIA scheme is to advance a sustainability goal by regulating on-ground development, it is axiomatic that the scheme will in some manner, have to transform the generality of the sustainability goal into specific physical parameters for the development. As discussed in chapter three, under an ESD goal those parameters are directed to maintaining ecological function.<sup>1108</sup> Logic suggests two approaches to the task of identifying the environmental features and processes essential to maintaining ecological function. The first is identification in advance, through a general process of environmental planning or other process of organising environmental information. The second is to identify ecological function at the point of assessment, by applying specific principles or ecological parameters, derived from higher-level principles, as decision rules. The literature is consistent with this logic.

#### *Environmental Impact Assessment in a Policy and Planning Context*

The origins of EIA are usually traced to United States' *National Environmental Policy Act of 1969*.<sup>1109</sup> Even though that Act had established EIA in the context of a formal statement of environmental policy goals, and even though there was some early recognition of the need to maintain the links between EIA and policy goals,<sup>1110</sup> the dominant approach to EIA that emerged internationally, particularly in the early years, was an information processing model, which focused on gathering information to assist decision-makers on the assumption that there is an identifiable 'correct' answer to resource allocation decisions.<sup>1111</sup> It is thus not surprising that early efforts to improve the outcomes of EIA

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<sup>1108</sup> For this reason it is not necessary to consider some of the literature otherwise relevant to this topic, as it is premised on the fact that often there is no agreed definition of sustainability: see for example Peter Hardi, 'The long and winding road of sustainable development evaluation' in Clive George and Colin Kirkpatrick (eds), *Impact Assessment and Sustainable Development: European Practice and Experience* (Edward Elgar 2007).

<sup>1109</sup> 42 U.S.C. §4321 et seq (1969).

<sup>1110</sup> See for example S Myers, 'US experience with national environmental impact legislation' in T O'Riordan and R D Hey, *Environmental impact assessment* (Saxon House, 1976) 45, 51. See also John S Winder Jr and Ruth H Allen, *The Environmental Impact Assessment Project: A Critical Appraisal* (Institute of Ecology, Washington DC, 1975); a key problem identified in this study of EIA under the United States *National Environmental Policy Act*, the world's first EIA scheme, was an overemphasis on the EIS itself and a loss of sight of the goals of the broader policy scheme of which the EIA formed a part (at 37).

<sup>1111</sup> Andrew Macintosh, 'Best Practice Environmental Impact Assessment: A Model Framework for Australia', (2010) 69 *Australian Journal of Public Administration* 401, 403. In another context, Hamilton has suggested that this type of thinking reflects Enlightenment belief in rationality: Clive Hamilton, 'Policy lessons from the RAC Experiment', in Clive Hamilton and David Throsby (eds) *The ESD Process: Evaluating a Policy Experiment* (Academy of Social Sciences in Australia 1998) 118.

tended to focus on enhancing the tool of EIA itself. Examples are Beanlands' and Duinker's ecological framework for EIA, which included a requirement to identify 'valued ecosystem components' without expressly identifying any particular goals against values on which that identification should be based; and the adaptive approach to environmental assessment and management developed by Holling et al.<sup>1112</sup>

It was the Brundtland Report that catalysed a renewed focus on the connections between EIA and policy. Brundtland called for EIA to move upstream, from assessing the environmental impacts of products and projects to assessing the impact *and sustainability* of policies and programs, 'especially major macroeconomic, finance and sectoral policies that induce significant impacts on the environment'.<sup>1113</sup> Responding to *Brundtland*, Sadler and Jacobs were soon arguing that it was 'now widely recognised' that to function effectively, EIA must be supported by '[a] prior-order policy-planning framework to focus analysis and guide evaluation', along with post-decisional mechanisms for monitoring and review.<sup>1114</sup> They, like Brundtland, proposed that EIA take a more strategic approach, but in their case within a policy and planning framework that would 'yield a coherent context for impact evaluation, development control, and learning from experience'.<sup>1115</sup> This would involve a focus on cumulative impacts; making EIA more problem-focused and value-based and changing its stance from 'react and cure' to 'anticipate and prevent'.<sup>1116</sup>

Sadler would further develop this approach, proposing a 'framework of sustainability'.<sup>1117</sup> This framework provided a *chapeau* to assessment processes, under which EIA would be enhanced but still be applied at the project level, while SEA would be used to 'scope towards sustainability', screening economic and development policies for environmental implications by reference to national policy or strategy.<sup>1118</sup> The implication was that a three-

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<sup>1112</sup> Gordon E Beanlands and Peter N Duinker, *An Ecological Framework for Environmental Impact Assessment in Canada* (Institute for Resource and Environmental Studies, Dalhousie University and Federal Environmental Assessment Review Office 1983); C S Holling (ed), *Adaptive Environmental Assessment and Management* (John Wiley and Sons 1978). An Australian exception during the early years of EIA is the *Environmental Planning and Assessment Act 1979*, No 203 (NSW), which established EIA as a tool operating within a hierarchy of environmental plans and policies and a broad statutory object of 'environment protection'.

<sup>1113</sup> WCED, above n 7, 222.

<sup>1114</sup> Barry Sadler and Peter Jacobs, 'A Key to Tomorrow: On the Relationship of Environmental Assessment and Sustainable Development' in Peter Jacobs and Barry Sadler, 'Sustainable Development and Environmental Assessment: Perspectives on Planning for a Common Future, A Background Paper Prepared for the Canadian Environmental Assessment Research Council' (Canadian Environmental Assessment Research Council 1988) 17, 19.

<sup>1115</sup> Ibid 23.

<sup>1116</sup> Ibid 20–23.

<sup>1117</sup> Barry Sadler, 'Environmental Sustainability Assessment and Assurance' in Judith Petts (ed), *Handbook of Environmental Impact Assessment*, Volume 1, *Environmental Impact Assessment: Process Methods and Potential* (Blackwell Publishing 1999).

<sup>1118</sup> Ibid 29–30.

tier approach was required to achieve sustainability goals: national policies and strategies at the macro-level, based on the application of sustainability principles; specific policies, plans and programs at the meso-level, assessed by SEA for compliance with national policies; and project-based EIA at the micro-level, done in the context of the policies, plans and programs from higher levels.

In a similar vein, Rees would observe that:

Critics of 'traditional' [EIA] have long observed that in the absence of a broader policy and planning context, without knowing potentially competing resource uses and values it is impossible to assess the 'significance' of impacts associated with isolated projects.<sup>1119</sup>

Rees' response was to propose an approach based on three elements that correspond broadly to Sadler's approach, in reverse order. These were cumulative environmental assessment through comprehensive regional monitoring, which would then be compared to regional carrying capacity, which is determined in turn by reference to sustainability concepts.<sup>1120</sup>

Scholars of impact assessment have continued to advance approaches of this type. Partidário for example argued at the turn of the century that strategic environmental assessment should be conceptualised within a policy and planning context.<sup>1121</sup> Most recently, Pope et al argue in relation to Sustainability Impact Assessment that three basic components are required for assessment: a conception of sustainability, a representation of sustainability, and a decision-making context.<sup>1122</sup> The latter in turn requires a 'subject of assessment' (eg a development proposal) and a 'decision question' (eg a threshold to apply).<sup>1123</sup> Again, these correspond broadly with Sadler's three tiers.

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<sup>1119</sup> Rees, 'A Role for Environmental Assessment in Achieving Sustainable Development', above n 258, 286.

<sup>1120</sup> Ibid 285–286.

<sup>1121</sup> See Maria Rosário Partidário, 'Elements of an SEA framework — improving the added-value of SEA', (2000) 20 *Environmental Impact Assessment Review* 647, 657; see also Clark, R, 'Making EIA count in decision-making' in Maria Rosário Partidário and Ray Clark (eds) *Perspectives on Strategic Environmental Assessment*, (Lewis Publishers, 2000) 15.

<sup>1122</sup> Jenny Pope, Alan Bond, Jean Hugé and Angus Morrison-Saunders, 'Reconceptualising sustainability assessment' (2017) 62 *Environmental Impact Assessment Review* 205 especially at 212–213. Sustainability Impact Assessment remains essentially a creature of theory rather than practice: see the discussion in Jenny Pope, David Annandale and Angus Morrison-Saunders, 'Conceptualising Sustainability Assessment', (2004) 24 *Environmental Impact Assessment Review* 595, especially at 607.

<sup>1123</sup> Ibid.

*Approaches Involving Identification of Values Essential to Ecosystem Function During Impact Assessment*

While Brundtland catalysed the reconnection of EIA and policy, the Rio Conference formalised that connection by declaring, as one of 27 principles of environment and development in the Rio Declaration, the need for EIA of activities likely to have a significant adverse effect on the environment.<sup>1124</sup> Although the Rio implementation plan, *Agenda 21*, stopped short of drawing a formal link between EIA and its policy context, it made the link in all but name by devoting significant attention to the need for policy integration; integrated approaches to land planning and management; and improved information to support decision-making.<sup>1125</sup> In relation to the latter, it argued that '[m]ethods for assessing interactions between different sectoral ... parameters are not sufficiently developed' and called for the development of 'indicators of sustainable development to provide solid bases for decision making'.<sup>1126</sup>

As George has noted, subsequent progress in developing indicators for application at project-approval level was limited.<sup>1127</sup> This is probably true of the other measures for improved decision-making advocated by *Agenda 21*, certainly for Australia, but in any event the dearth of an information and policy context for environmental decisions led George to argue that the difficulties associated with indicators can be avoided by deriving sustainability criteria from general sustainability principles such as IGE. Specifically, he argued that the principles of IGE and precaution, taken together, imply strong sustainability wherever there is a threat of serious or irreversible environmental harm, further implying a decision-rule that, under an EIA scheme, the 'residual adverse unmitigated impact' on natural capital must be zero and that '[a]ny non-zero adverse impact is unacceptable, no matter how small'.<sup>1128</sup>

In a similar vein, Gibson et al argue that decisions in pursuit of sustainability objectives are best made by reference to sustainability-based decision criteria (styled as 'sustainability

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<sup>1124</sup> *Rio Declaration*, above n 282, Principle 17. Contemporaneously the *Biodiversity Convention* included a requirement that countries implement EIA for projects likely to have a significant adverse impact on biodiversity: *Biodiversity Convention*, above n 111, Art 14(1)(a).

<sup>1125</sup> UNCED, *Agenda 21*, above n 282, chapters 8, 10, 40.

<sup>1126</sup> *Ibid* [40.4].

<sup>1127</sup> Clive George, 'Testing for Sustainable Development Through Environmental Assessment', (1999) 19 *Environmental Impact Assessment Review* 175, 175–176.

<sup>1128</sup> *Ibid* 184–185. While George takes SS to require the conservation of natural capital generally, not just CNC, his second condition of uncertainty or irreversibility makes the class of natural capital to be protected under his approach very similar to CNC as defined in chapter 3 and the two are taken to be equivalent here (at 183).

requirements”). Because this inevitably involves trade-offs, he then proposes six basic rules for trade-off decisions.<sup>1129</sup> It is not necessary here to consider Gibson’s criteria or trade-off rules in detail, beyond noting that the principles he identifies are broadly compatible with the Australian principles of ESD and that his third trade-off rule commences with the proposition that:

No trade-off that involves a significant adverse effect on any sustainability requirement area (for example, any effect that might undermine the integrity of a viable socio-ecological system) can be justified unless the alternative is acceptance of an even more significant adverse effect.<sup>1130</sup>

This approach gives a similar outcome to George’s: that decisions under an EIA scheme should not approve a loss (or a *net* loss, where ecological offsets are genuinely feasible) of any requirement previously identified as essential to sustainability, such as, under the ESD principles, ecological integrity.

### 7.2.2 Australian Literature on EIA and the EPBC Act

The literature directly discussing the operation of ESD under the EIA scheme is limited, but is complemented by aspects of the broader literature on both the Act and Australian EIA schemes generally, including what might be described as ‘precursor literature’ from the 1990s when national EIA frameworks were under review.

#### *Precursor Literature*

The approach incorporated into the *EPBC Act* in 1999 to apply ESD in EIA had its origins in a review of Commonwealth EIA earlier in the decade. Court, Wright and Guthrie, former consultants to the review, drew on that work to argue that if ESD were to be pursued successfully, governments would need to establish, by legislation, ‘an integrated policy and institutional framework for sustainable development, and to recognise the concept of ESD in relation to land use and resource decision-making’.<sup>1131</sup> This would involve four core elements: first, the compilation of an ecological information framework; second, the preparation of regional or sectoral ESD plans that would identify ‘carrying

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<sup>1129</sup> Robert B Gibson, with Selma Hassan, Susan Holtz, James Tansey and Graham Whitelaw, *Sustainability Assessment: Criteria and Process* (Earthscan, 2005).

<sup>1130</sup> *Ibid* 135.

<sup>1131</sup> John Court, Colin Wright and Alasdair Guthrie, ‘Environmental Assessment and Sustainability: Are We Ready for the Challenge?’ (1996) 3 *Australian Journal of Environmental Management* 44, 56.

capacities’ or ‘limits of acceptable change’; third, SEA of government policies, plans or programs for development, using cumulative impact assessment (CIA) to allocate resources within those limits; and finally project-based EIA, also using CIA and undertaken within the framework established by SEA at regional level.<sup>1132</sup>

Interestingly, the ‘integrated policy and institutional framework for sustainable development’:

should include for adoption ... the precautionary principle, intergenerational equity, conservation of biodiversity and ecological integrity and improved valuation and pricing of environmental resources.<sup>1133</sup>

If this integrated policy framework is taken as the manifestation of the integration principle, these are the same five principles later legislated as s 3A of the *EPBC Act*, in the same order (see Box 7.4).

Perhaps stimulated by the review, other Australian scholars addressed the implementation of ESD through development decisions at this time. Bradbury argued the potential of planning instruments as a means of providing the detail needed by decision-makers to apply ESD effectively to specific developments, proposing that planning instruments could be required by law to aim to achieve ESD.<sup>1134</sup> Gullett on the other hand argued for a decision rules model based on Australia’s obligation to act on the *Rio Declaration*:

Rather than continuing merely to repeat the principle [of ESD] in hortatory terms, the federal government must shift attention to developing specific operating criteria or “rules” which must ensure some minimum content ... [o]therwise the principle faces the prospect of being reduced merely to an unachievable aspiration ...<sup>1135</sup>

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<sup>1132</sup> Ibid, 46, 53, 54, 56.

<sup>1133</sup> Ibid 56.

<sup>1134</sup> Alan Bradbury, ‘Reality or rhetoric? The implementation of ecologically sustainable development in the New South Wales environmental planning system’ (1997) 3 *Local Government Law Journal* 86, especially at 90, 105.

<sup>1135</sup> Gullett, ‘Environmental Protection and the “Precautionary Principle”: A Response to Scientific Uncertainty in Environmental Management’ above n 402, 65.

*Later Australian Literature Concerning EIA Schemes*

As with the international literature, arguments for sustainability frameworks or decision rules continue to be made in the Australian literature, often in the context of criticising what Macintosh describes as the superficial legal institutionalisation of the typical Australian approach to incorporating ESD into law, which is simply to include references to ESD in objects and mandatory considerations.<sup>1136</sup> As Macintosh points out, objects clauses are notoriously weak guides to decision-making and mandatory considerations are similarly weak in that they require decision-makers to do no more than give genuine consideration to the matter specified, leaving the decision-maker entirely free as to what weight to give that matter.<sup>1137</sup> In the *EPBC Act* this problem is compounded by the failure to define ESD adequately.<sup>1138</sup>

Justice Preston has made a similar argument, that environmental statutes in Australia prescribe 'conditional ... rules of what can and cannot be used or exploited in the environment' in the form of EIA schemes and therefore do not protect what is 'particularly significant'. Thus, 'absolute' rules are required to protect those components of the environment that require unconditional protection.<sup>1139</sup> Justice Preston is agnostic as to whether the 'absolute rule' should be based on conforming to environmental plans or applying principles-based decision rules:

This may be achieved by identifying those areas or components of the environment that are unconditionally to be protected from all harm. This could be based on research findings about the most important and appropriate areas or components to be protected ... It may involve identifying environmental outcomes or standards that are not to be compromised or are to be achieved, as the case may be.<sup>1140</sup>

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<sup>1136</sup> Macintosh, 'The impact of ESD on Australia's environmental institutions', above n 83, 41.

<sup>1137</sup> Ibid 9, citing *Bat Advocacy Inc v Minister for Environment Protection, Heritage and the Arts* (2011) 180 LGERA 199, at [44]. See also D E Fisher, 'Considerations, principles and objectives in environmental management in Australia' (2000) 17 *Environmental Planning and Law Journal* 487.

<sup>1138</sup> Ibid 10.

<sup>1139</sup> Justice Brian J Preston, 'Adapting to the impacts of climate change: The limits and opportunities of law in conserving biodiversity', (2013) 30 *Environment and Planning Law Journal* 375, 376. Justice Preston's argument is made in a context of adapting to climate change but does not depend on that context. See also Guy J Dwyer and Mark P Taylor, 'Moving from consideration to application: The uptake of principles of ecologically sustainable development in environmental decision-making in New South Wales' (2013) 30 *Environment and Planning Law Journal* 185, 216.

<sup>1140</sup> Preston, 'Adapting to the impacts of climate change: The limits and opportunities of law in conserving biodiversity', above n 1139, 376.



However, in critiquing Australian EIA schemes, such as the *Environmental Planning and Assessment Act 1979* (NSW), on the basis that they leave it to decision-makers to balance multiple and often competing aims, none of which are assigned priority or weight, Justice Preston proposes a threefold approach that aligns with the principles-based decision rules model:

First, the conservation of biological diversity and ecological integrity, or other desired ecocentric considerations need to be expressly and specifically identified as objects and relevant matters that must be taken into account in the exercise of powers and functions under the statute.

Secondly, if there is potential for conflict within or between objects or relevant matters, the priority or relevant weight to be accorded to each object or relevant matter needs to be stated.

Thirdly, if the object or relevant matter involves an outcome or standard to be achieved, then the statute needs to be drafted so as to require the decision-maker to exercise the relevant power or function so as to achieve that result and not merely to consider the matter ...<sup>1141</sup>

Chief Judge Preston has driven at the same point in his judicial capacity:

In order to achieve sustainability, however, hortatory statements of principle and aspirational goals are insufficient; *the grand strategy must be translated into action*. This involves not only institutionalising the principles of ecologically sustainable development in policies and laws, but also ensuring that functions under those policies and laws are exercised in a way so as to promote and implement the principles of ecologically sustainable development. This involves good governance.<sup>1142</sup>

Fowler reaches a synoptic conclusion, arguing that there has been considerable confusion between three distinct elements of ESD strategy: first, defining ESD as a goal; second, endorsement of that goal as an objective via a statutory objects clause; and third, the application of ESD via 'directing' principles that are spelled out in legislation as 'rules to be applied by those administering the relevant legislation'.<sup>1143</sup> Fowler argues further that of the four principles in the IGAE (ie the Principles of Environmental Policy), only the precautionary principle is actually capable of serving as a directing principle. In his view

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<sup>1141</sup> Ibid 378.

<sup>1142</sup> *Hub Action Group Inc v Minister for Planning* (2008) 161 LGERA 136, per Preston CJ at 141 (NSW Land and Environment Court (emphasis added)).

<sup>1143</sup> Robert Fowler, 'Australian Environmental Law — its historical and current political context' (2016) 31(2) *Australian Environmental Review* 26, 27–28. This journal is not peer reviewed and Fowler is a participant in the non-government review. For further information on the review, see Australian Panel of Experts on Environmental Law (APEEL) *Blueprint For The Next Generation Of Environmental Law* and 'The APEEL Technical Paper Series', <<http://apeel.org.au>> (viewed 9 April 2017).

the principle of intergenerational equity and the biodiversity principle are more in the nature of objectives belonging in an objects clause, while the valuation principle is better described as a 'design' principle, which identifies mechanisms desirably included in law and policy rather than providing direction to a decision-maker.<sup>1144</sup> Fowler concludes that, given this analysis, 'it is hardly surprising that the endorsement of ESD through legislation has not resulted in significant changes to the way in which environmental governance operates in practice in Australia.'<sup>1145</sup> He goes on to argue for additional directing principles, but, relevantly here, for the development of 'national and regional strategic environmental instruments which would be given effect through ... implementation plans'.<sup>1146</sup> In other words, to promote the goal of ESD the principles of ESD need either further development as 'directing principles' (to inform the decision rules model), or translation into plans (the spatial planning model).

This raises a further critique of the typical Australian approach, that the superficial legal institutionalisation of ESD is not confined to a lack of directive force in ESD provisions. Fowler makes the point generally, while Macintosh argues with specific reference to the EPBC Act, that the principles of ESD do not constitute a coherent and integrated set of decision rules ready for insertion into law. As Macintosh puts it, 'ESD's limited impact is partly a product of the superficial way it has been incorporated into formal institutions, particularly the law'.<sup>1147</sup> Applied to the *EPBC Act*, he finds that as a set of decision rules the ESD principles are, in effect, neither fish nor fowl. If the Act is interpreted consistently with WS, this interpretation leads to redundancies and contradictions in the principles of ESD, for example leaving the biodiversity principle either redundant (to the extent that it requires particular costs and benefits to be taken into account when the general approach would already achieve this) or contradictory (to the extent that treating biodiversity as a 'fundamental consideration' suggests that it be given greater weight, unlike the integration principle, which does not).<sup>1148</sup> On the other hand, if the Act is interpreted consistently with SS, the statutory scheme possesses 'a degree of theoretical and legal coherence', but 'the notion that the "promotion of ESD" requires the adoption of a binding sustainability constraint ... is ambiguous in the extreme ...'<sup>1149</sup> In other words, while the way in which

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<sup>1144</sup> The principle of policy integration is arguably a fifth directing principle because it is included in s 3A of the EPBC Act. However, in the IGAE it precedes the listing of these four principles, in a separate paragraph 3.4.

<sup>1145</sup> Ibid 28.

<sup>1146</sup> Ibid 28, 29.

<sup>1147</sup> Andrew Macintosh, 'The Impact of ESD on Australia's Environmental Institutions', above n 83, 40.

<sup>1148</sup> Ibid 43.

<sup>1149</sup> Ibid.

the ESD principles are incorporated into the *EPBC Act* is inconsistent with WS, the language of the Act falls far short of the more coherent model of SS, leaving the impact of ESD under the Act ‘muted’.<sup>1150</sup>

### 7.2.3 Common Themes in the Literature Concerning ESD and EIA

There is a high degree of congruence in the international literature that advancing sustainability goals through an EIA scheme requires applying either the planning or the decision rules models, as part of a three-tier approach. Adopting the terminology of Pope et al, both approaches require a ‘conception of sustainability’, in practice a clearly defined social goal such as ESD. Both approaches require a ‘representation of sustainability’, either a suitable set of plans and policies or an appropriate set of decision rules. Finally, both involve a ‘decision-making context’ (here, EIA), a ‘subject of assessment’ (a development proposal) and a ‘decision question’. Under the spatial planning model, the decision question is whether the proposal conforms to the plans, while under the decision rules model it is whether the proposal conforms to those rules. There is no significant view in the literature that one approach is better than the other.

Under the interpretation of ESD argued in this thesis, the plans or decision rules must physically identify, or enable identification of, the aspects of the environment that are essential to biodiversity and ecological function. It follows from the principles in the literature that for EIA to support decisions that promote ESD, one of three things must be present: an ecological plan, a decision-rule specific to the relevant ecological impacts, or a more general decision-rule supported by a comprehensive environmental information system. Simply making the legal language more direct, for example by directing the decision-maker to not to act inconsistently with ESD, will not address the problem alone because of the need to identify the relevant environmental values in biophysical terms.<sup>1151</sup> In fact, the role of information in all three cases is so central that the two models tend to converge. The spatial planning model can be summarised as ‘inform, plan and conform’ and the decision-rules model as ‘derive rules, inform and conform’. The next section considers how the *EPBC Act* came to embody incomplete versions of both models.

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<sup>1150</sup> Ibid.

<sup>1151</sup> For a canvassing of possible legal formulations that direct a decision-maker to conform to ESD, see Fisher, ‘Sustainability — the Principle, its Implementation and its Enforcement’, above n 84.

## 7.3 Achieving ESD through EPBC Act Environmental Approvals: Policy Intent and Legislative Design

It seems clear from the literature, a fair proportion of which predates the *EPBC Act*, that promoting ESD through an EIA scheme, would require that the Act embody either the planning or decision-rules model. The Act embodied both models to a certain degree, but neither in a fulsome way. To help assess why this was the case, this section traces the origins and development of the *EPBC Act*, starting in the early 1990s with the negotiation of the IGAE and NSESD and concurrent national EIA reforms.

### 7.3.1 A Confluence of Policy Reforms

#### *ANZECC National Approach to EIA*

In 1991, Australian governments released a policy statement on EIA, *A National Approach to Environmental Impact Assessment in Australia*, accompanied by a background paper.<sup>1152</sup>

Although originating from the 1989 Statement, the initiative was driven largely by efficiency concerns, with the Special Premiers' Conference of 1990 highlighting the potential for streamlining of EIA processes.<sup>1153</sup> Nevertheless, the introduction to the statement emphasised the importance of policy context for EIA schemes:

Formulating public policy with due consideration for environmental factors ... has major implications for the subsequent evaluation of individual development proposals. If the policy context already exists and is environmentally sound, it follows that environmental assessment of related proposals will be more readily accomplished and with fewer surprises for all concerned. Similarly, EIA is not a substitute for the planning process — the assessment of proposals is enhanced if there is a planning context which has taken environmental factors into account.<sup>1154</sup>

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<sup>1152</sup> Australian and New Zealand Environment and Conservation Council, *A National Approach to Environmental Impact Assessment in Australia* (ANZECC 1991) ('ANZECC National Approach'); Australian and New Zealand Environment and Conservation Council, *A National Approach to Environmental Impact Assessment in Australia: Background Paper of the Working Group, A Supplement to the Statement of National Principles and Practice For Environmental Impact Assessment in Australia* (ANZECC, 1991) ('ANZECC National Approach: Background Paper').

<sup>1153</sup> Special Premiers' Conference, 'Towards a Closer Partnership', *Communique*, above n 358.

<sup>1154</sup> ANZECC National Approach, above n 1152, 1.

The document also linked EIA with ESD. Under the heading ‘Connections between EIA and [ESD]’, EIA was described as ‘one way amongst many for achieving the objectives of [ESD].’<sup>1155</sup> Major ‘connecting points’ where EIA could assist in achieving ESD included ‘the use of resources by present generations ... while protecting the interests of future generations through, for example ... maintaining and enhancing natural capital ...’, along with ‘protection of biodiversity and ecosystem integrity’.<sup>1156</sup> And the first item in a list of ‘principles for government’ was that governments should ‘[p]rovide policy and planning frameworks which set contexts for the environmental assessment of proposals’.<sup>1157</sup>

The implication was that EIA would operate within a comprehensive policy context, one with ESD objectives. This is reflected in a figure included in the background paper and reproduced below:

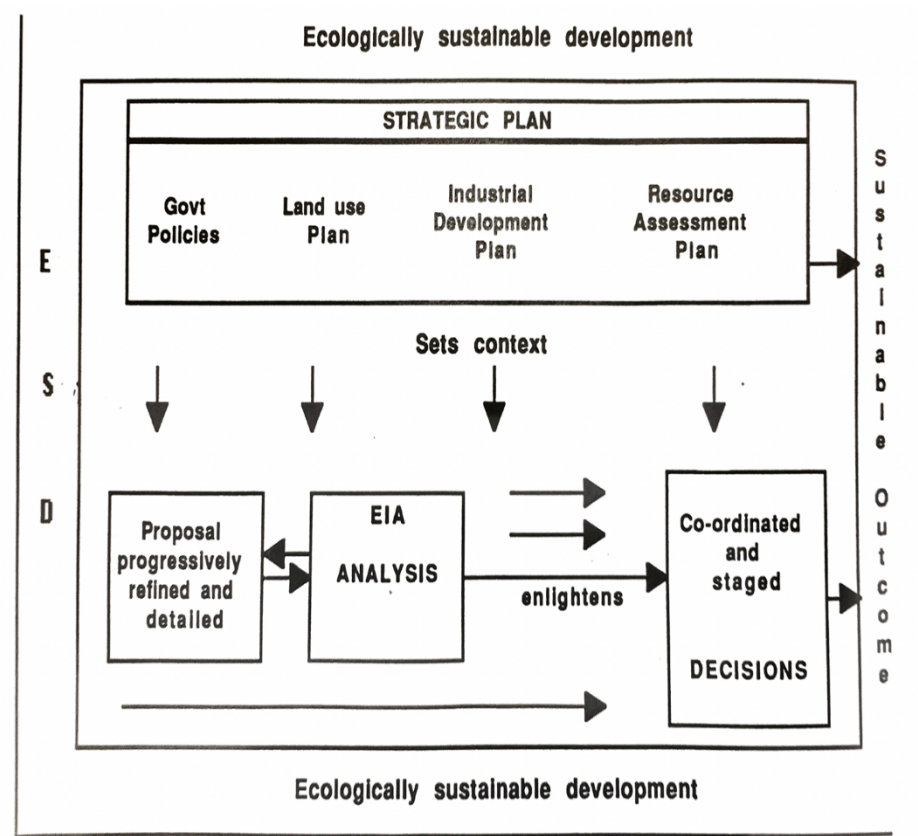


Figure 1. Setting the context for environmental impact assessment

Figure 7.1 *Setting the Context for Environmental Impact Assessment*<sup>1158</sup>

<sup>1155</sup> Ibid 4.

<sup>1156</sup> Ibid.

<sup>1157</sup> Ibid 8.

<sup>1158</sup> Source: *ANZECC National Approach: Background Paper*, above n 1152 Figure 1.

However, as Harvey noted at the time, the link drawn between EIA and ESD was not drawn tightly; neither the national approach to EIA, a national policy reform, nor the NSESD, a national program, adopt an explicit stance that would operationalise the figure from the background paper and ensure that ESD was developed in a way that would provide the desired 'comprehensive policy context'.<sup>1159</sup>

### *Policy Relationship between ESD and EIA*

As discussed in chapters three and five, two major reform agreements, the IGAE and NSESD, were negotiated in the following year. They overlap in relation to ESD and EIA and must be read together. The IGAE set out the 'Principles of Environmental Policy', consisting mostly of ESD principles, but the NSESD also included a comprehensive definition of ESD that was not fully consistent with the Principles of Environmental Policy. This would cause difficulties in the drafting and passage of the EPBC Bill and is discussed below. Both documents deal with the linkage between EIA and ESD. In the IGAE, the schedule on 'resource assessment, land-use decisions and approval processes' provides that the 'concept' of ESD should be used in 'assessment of natural resources, land-use decisions and approval processes' and that land-use frameworks should have regard to the ecologically sustainable use of natural resources and provide for cumulative impact assessment (CIA).<sup>1160</sup> In the NSESD, the chapter on land-use planning and decision-making calls up those commitments.<sup>1161</sup> On EIA, the IGAE is concerned primarily with efficient federal arrangements while the NSESD chapter on EIA is more concerned with policy effectiveness, identifying the 'challenge' as being to minimise adverse human effects on the environment by improving EIA.<sup>1162</sup>

Despite some overlap and inconsistent definitions of ESD, the policy intent of the national environmental reform agenda with respect to ESD and EIA appears to be that land and resource use should be subject to comprehensive assessment processes, applying the principles of ESD, with the objective of maintaining ecological function; and that project-

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<sup>1159</sup> See Nick Harvey, 'The Relationship Between Ecologically Sustainable Development and Environmental Impact Assessment in Australia: A Critique of Recent National Reports' (1992) 9 *Environment and Planning Law Journal* 265. (Note the postscript to this article acknowledging that it was completed before the release of the IGAE).

<sup>1160</sup> IGAE, above n 370, Schedule 2, cls 1, 2, 3 [2].

<sup>1161</sup> NSESD, above n 354, Chapter 13, 'Land Use Planning and Decision Making', at 61.

<sup>1162</sup> Compare IGAE Schedule 3 with NSESD Chapter 15, 'Environmental Impact Assessment'.

based EIA should operate within that context.<sup>1163</sup> This aligns broadly with the depiction of concepts in figure 7.1, although there is some shift in terminology from planning to resource assessment.

### 7.3.2 Evolution of Policy Under Keating Government to 1996

The year after finalising the IGAE and NSESD, the Commonwealth announced a public review of Commonwealth EIA in 1993 ('Review of EIA'). Although the NSESD had included a commitment that each jurisdiction to review the role of EIA, the relative priority and scale of this Commonwealth-only review and its emphasis on the EIA *process* is surprising, as the 'strategic approach' for EIA in the NSESD was cast more broadly and included references to improving 'coverage and effectiveness' and 'the subsequent decision making process', together with 'coordinated effort' to enhance the knowledge base.<sup>1164</sup> As a result of its emphasis on process, providing a policy context for EIA appeared to be a second-order issue in the review, with the initial discussion paper merely identifying as a 'potential issue' the need to incorporate the 'goal, core objectives and guiding principles for achieving [ESD]' from the NSESD.<sup>1165</sup> The Government gave no reason for using the NSESD rather than the IGAE as the source of ESD principles but the NSESD appears preferable from either a policy or political perspective. From a policy perspective the NSESD takes a more structured and complete approach to ESD than the IGAE, employing a clearly worded hierarchy of goal, core objectives and guiding principles, while from a political perspective the NSESD had been built on the stakeholder engagement of the ESD process and was a much more broadly based and accessible document than the legalistic IGAE. In any event, successive governments would prefer the NSESD over the IGAE in policy development until confronted by Senate opposition to the EPBC Bill in 1999.

Although the review played down the importance of policy context, one of the consultancy reports commissioned for the review nevertheless included a detailed review of the national environmental reform agenda documents, from which it identified the need

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<sup>1163</sup> This would include having regard to cumulative impacts to assist assessment of impacts against maintenance of ecological function.

<sup>1164</sup> NSESD, above n 354, 64 (Chapter 15, 'Environmental Impact Assessment').

<sup>1165</sup> Ros Kelly, Minister for the Environment, Sport and Territories, 'Public Review of Environmental Impact Assessment', *Media Release*, 19 October 1993 (Minister for the Environment, Sport and Territories 1993); Commonwealth Environment Protection Agency, *Public review of the Commonwealth Environmental Impact Assessment process, Initial Discussion Paper: Setting the Direction* (CEPA 1993) i, 1, 12.

to 'broaden the scope and application of EIA to account for ESD'.<sup>1166</sup> This broadening of scope comprised 'four distinct initiatives':

- incorporating the guiding principles of ESD into project EIA and ensuring that sustainability criteria are suitably identified and addressed therein;
- increasing the rigour and predictive capability of EIA for project determination and environmental management [through evaluation, monitoring and auditing];
- providing for CIA at project level and in ... regional environmental plans, including for the sustainable management of resources and appropriate application of the carrying capacity concept; and
- using SEA in the formulation of policies and programs at the macro-economic level.<sup>1167</sup>

While this approach emphasises the spatial planning model, the references to the need for sustainability criteria clearly point also to the decision rules model.<sup>1168</sup> This may have been the source of the later policy ambivalence under which both models were pursued, but neither in full.

### *Main Discussion Paper*

The Government issued a 'Main Discussion Paper' later in 1994, proposing a range of options for achieving the objective of the review (see Box 7.2).

#### PUBLIC REVIEW OF THE COMMONWEALTH ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

#### **MAIN DISCUSSION PAPER**

...

#### **PART ONE: BACKGROUND TO THE REVIEW**

...

#### *Objective of Environmental Impact Assessment*

29. [T]he Environment Protection Agency proposes that the objective of environmental impact assessment should be the protection of the environment through supporting the application of the

<sup>1166</sup> See John D Court, Colin J Wright, Alasdair C Guthrie, Commonwealth Environment Protection Agency, 'Assessment of cumulative impacts and strategic assessment in environmental impact assessment', *Review of Commonwealth Environmental Impact Assessment*, (CEPA 1994) 6.17.

<sup>1167</sup> *Ibid.*

<sup>1168</sup> *Ibid* 6.20. The consultants assumed that regional planning framework within which the Commonwealth would make project-specific decisions would be undertaken by states. The Commonwealth would soon initiate consultation on bioregional planning, a specific variant of regional planning, but this sprang from a commitment to bioregional planning in the still-draft National Biodiversity Strategy, rather than from the EIA reforms: see Breckwoldt and Department of the Environment, Sport and Territories, 'Approaches to Bioregional Planning', above n 946.



principles of ecologically sustainable development. The Environment Protection Agency suggests that this objective should be clearly stated in the ... legislation and should form the basis for all decision making under the environmental impact assessment process.

### **Option 1**

The objective of environmental impact assessment should be the protection of the environment through supporting the application of the principles of [ESD].

...

## **PART II: REFORMING PROJECT ASSESSMENT**

...

### **ACCEPTABILITY CRITERIA**

...

146. Environmental impact assessment can be viewed as a process for ensuring the environmental acceptability of projects being considered for approval ...

whether they can be made acceptable through setting environmental project

147. To facilitate both environmental protection and project assessment, the Environment Protection Agency proposes the development and collation of comprehensive criteria for determining the environmental acceptability of projects. Many of these criteria already exist, such as State pollution controls, or can be developed through processes such as the National Environment Protection Council ...

### **Option 12**

The Environment Protection Agency proposes the development and collation of comprehensive criteria for assessing the environmental acceptability of projects undergoing environmental impact.

148. Clearly the development of environmental acceptability criteria is a major task and it will be some time before detailed criteria can be adopted. As an interim step, the Environment Protection Agency proposes generic criteria which can guide all participants in the assessment process until more detailed criteria are developed and accepted.

149. The environmental acceptability of a project will be largely determined by the nature of the receiving environment. The Environment Protection Agency proposes interim criteria based on the environmental values of receiving environments. In simple terms, receiving environments can be divided into three categories: conservation areas, production areas and high development areas. The criteria for each

category will reflect its environmental values as follows:

- conservation areas: environmentally acceptable proposals will be those which maintain the conservation values of the area. For example, only those activities within a World Heritage area which do not detract from the World Heritage values of that area can be considered environmentally acceptable ...
- production areas: environmentally acceptable proposals will be those which maintain the productive capacity of the environmental resources of the area. For example, only those proposals which are consistent with the principles of ecologically sustainable development can be considered environmentally acceptable. Most of Australia falls within the production area category. Production areas would include agricultural and pastoral areas, fishing grounds and river systems; and
- high development areas: environmentally acceptable proposals will be those which are, for example, clean and safe and can be accommodated with other activities in the area. No proposals resulting in pollution (environmentally unacceptable emissions or effluent) can be environmentally acceptable. High development areas would include urban and industrial areas.

150. In addition, all environmentally acceptable proposals must be clean and safe and must not threaten the survival of any species or ecological community.

*Interim Acceptability Criteria*

*In conservation areas, only those proposals which maintain the conservation values of the area will be environmentally acceptable.*

*In production areas, only those proposals which maintain capacity of the area will be environmentally acceptable.*

*In high development areas, only those proposals which are clean will be environmentally acceptable.*

*No proposal which threatens the survival of a species community will be environmentally acceptable.*

151. The above criteria are intended only as a starting point in determining environmental acceptability ...

...

### PART III: FUTURE DIRECTIONS

234. The implementation of the project assessment reforms, however, cannot be the end of the process of ongoing review and development of environmental impact assessment. It is becoming increasingly apparent that project assessment alone, however good the process, cannot wholly produce effective and efficient environmental protection through environmental impact assessment. For example, project assessment cannot deal effectively with the environmental consequences of government policies, plans and programs. Similarly, project assessment can only deal with the cumulative and regional impacts of development in a limited manner. Increasingly, governments will need to focus on more strategic environmental assessment to ensure that all environmental impacts are examined as efficiently as possible.

...

#### **Box 7.2 Extracts from Main Discussion Paper (1994), Commonwealth EIA Review<sup>1169</sup>**

The discussion paper displayed a reluctance to grapple with the more difficult issues of developing an ESD policy context for EIA, stating an 'initial focus' on project assessment procedures and deferring the strategic aspects to a second stage.<sup>1170</sup> Similarly, it identified the need for comprehensive criteria for assessing the environmental acceptability of projects but also deferred this on the basis that it was a major task. In the interim, the paper proposed generic acceptability criteria that divided the 'receiving environment' into three categories. For conservation areas (essentially reserves), the acceptability criterion was that proposals maintain the conservation values of the area. For production areas, comprising most of Australia, includ[ing] agricultural areas, fishing grounds and rivers, acceptability depended on maintaining the 'productive capacity' of the environmental

<sup>1169</sup> Commonwealth Environment Protection Agency, 'Public Review of the Commonwealth Environment Impact Assessment Process: Main Discussion Paper' (Main Discussion Paper) (Environment Protection Agency 1994).

<sup>1170</sup> Ibid 54.

resources of the area, for example through consistency with the principles of ESD. For high development areas including urban and industrial areas, proposals would be acceptable if they were, for example, clean and safe, which excluded those involving ‘unacceptable emissions or effluent’.<sup>1171</sup>

While the criterion for conservation areas is unexceptional and the criterion for high development areas tautological, the standard for production areas is noteworthy as it seems to equate ‘maintaining the productive capacity’ of environmental resources with consistency with the principles of ESD. This again hints at thinking, later reflected in the *EPBC Act*, that the goal of ESD might be achieved by identifying ESD principles and adopting them as decisional criteria. On the other hand, the paper argued later that it is becoming increasingly apparent that project assessment alone, however good the process, could not wholly produce effective and efficient environmental protection through conventional EIA. As a result, improved linkages between EIA and planning needed to be considered and governments would need to focus more on SEA to deal with cumulative and regional impacts. Perhaps the approach of consistency with ESD principles was only intended as an interim approach, but the EPBC Act would later treat this as the *default* approach.

#### *Outcomes of Review of EIA*

The Review of EIA was not completed until early 1996, just before a change of government. While some procedural reforms went ahead, the Review ended in failure. A 1995 Cabinet submission recommending reforms to the EIA process recorded significant disagreement between departments and was not considered;<sup>1172</sup> the Environment Department would later report that as there was a range of significant policy issues in respect of which ‘no consensus was reached and further policy development and consultation was required’, these issues were carried forward into the incoming government’s review of Commonwealth environmental legislation.<sup>1173</sup> Although the new government would deal with matters on its own terms and without reference to the EIA Review, there were similarities between the later EPBC Bill and the approach of the review,

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<sup>1171</sup> Ibid 34–35.

<sup>1172</sup> Australian Government, ‘Environmental Impact Assessment Review’, *Cabinet Submission 2440*, 18 October 1995 (NAA A14217, 2440); the Australian Archives records this submission as ‘no decision’.

<sup>1173</sup> Australian and New Zealand Environment and Conservation Council (ANZECC), *Guidelines and Criteria for Determining the Need for And Level of Environmental Impact Assessment in Australia* (ANZECC 1996); Department of the Environment, Sport and Territories, *Annual Report 1995–96*, above n 597, 48–49. The reforms that were made included national guidelines on the level of impact assessment.

including the policy ambivalence of engaging with both approaches to advancing sustainability goals through EIA schemes without fully pursuing either. While there is no documentary evidence for this, it would not be surprising if officials continued to draw on the Review of EIA as 'received wisdom' in advising the new government.

### **7.3.3 Evolution of ESD and EIA Policy Model as EPBC Bill Developed and Debated**

The Howard Government came to power in 1996 with objectives including improving outcomes from EIA and 'actively encourag[ing] and promot[ing] environmentally sustainable management'.<sup>1174</sup> Following a legislative review, the Government released a consultation paper on proposed new environmental laws in 1998 (Box 7.3).

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<sup>1174</sup> Liberal Party of Australia, *Saving Our Natural Heritage*, above n 578, 48–49.

## **Reform of Commonwealth Environment Legislation**

### **Consultation Paper**

...

#### **1. Objectives of the Review of Environmental Law**

...

The proposed Environment Protection Act will promote implementation of the principles of [ESD] through the adoption of an efficient environmental impact assessment and approval process.<sup>1175</sup>

...

To develop and implement this framework, it is necessary to overcome the following deficiencies in the Commonwealth's existing environmental law.

- The Commonwealth's environmental statutes largely fail to recognise and implement the principles of [ESD] ... now universally accepted as the basis upon which environmental, economic and social goals should be integrated in the development process. The failure to fully recognise and implement the principles of ecologically sustainable development is regarded as a fundamental deficiency in the Commonwealth's existing regime.

The ... Government is committed to correcting these deficiencies through the comprehensive reform ... The result should be a dynamic and flexible environmental law regime that promotes ecologically sustainable development ...

...

#### **1.2 An Efficient Regime that Delivers Certainty, Minimises Duplication and Incorporates a Streamlined Approval Process**

...

The [NSESD] refers, in its core objectives, to the need to follow a path of economic development that safeguards the welfare of future generations. The guiding principles of that Strategy recognise the need to develop a strong, growing and diversified economy and to maintain and enhance international competitiveness in an environmentally sound manner.

...

#### **1.3 Enhance Environment Protection and Promote Sustainable Use**

...

The ... government believes that best practice environmental management requires a greater focus on early, strategic planning. Acknowledging that state governments are primarily responsible for on-ground land management and planning issues, the proposed reforms seek to facilitate Commonwealth and State attempts to progress early and strategic planning initiatives for key areas such as World Heritage properties ... Early Commonwealth involvement in planning ... will help ensure better protection and will substantially reduce the need for Commonwealth involvement in individual development approvals. This approach should complement the Commonwealth's commitment to progress, in cooperation with the States and in accordance with, the National Strategy for the Conservation of Australia's Biodiversity, bioregional planning across Australia.

...

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<sup>1175</sup> Writer's note: At this point two bills were proposed, an Environment Protection Bill and a Biodiversity Conservation Bill; the Government would later proceed with a combined bill.

## 2. Environment Protection Act

...

At the national level, the [IGAE] requires the Commonwealth and the States to implement the principles of [ESD] in all decision making. All jurisdictions have also endorsed the [NSED] ... The [NSED] sets out an agreed framework under which governments are to make decisions and take actions to pursue [ESD].

...

The principles of [ESD] to be included in the Environment Protection Act will be based on the definition endorsed by COAG in 1992 and incorporated in the Natural Heritage Trust of Australia Act 1997. Under this Act, the principles of ecologically sustainable development consist of the following:

[The paper set out the Core Objectives and Guiding Principles from the NSED.]

The proposed reforms will ensure principles of [ESD] are applied to Commonwealth involvement in the assessment and approval process for activities and proposals that may have a significant impact on the environment.

Application of these principles is designed to integrate economic, social and environmental considerations in decision making. In this context, the major focus of the Environment Protection Act will be to ensure that environmental factors are efficiently integrated within the development process, especially through an environmental impact assessment regime that reflects world's best practice.

### 2.3 Structure and Content of the Environment Protection Act

...

#### 2.3.4 Assessment Process

...

In keeping with [ESD] principles, the Act will enable consideration of any relevant cumulative and regional impacts of a proposal.

...

#### 2.3.5 Approval Process

...

The Act will provide that the consent decision is to be based on [ESD] principles, with proper regard being given to economic and social factors as well as matters of national environmental significance. Advice on the economic and social aspects of the proposal will be sought from other relevant Commonwealth Ministers and gathered from any State assessment processes dealing with such matters.

...

### **Box 7.3 Extracts from Reform of Commonwealth Environment Legislation: Consultation Paper<sup>1176</sup>**

In discussing the weaknesses of the current regime, the paper argued that current Commonwealth environmental laws largely failed to recognise and implement the principles of ESD, which were now universally accepted as the basis upon which environmental, economic and social goals should be integrated in the development process.

<sup>1176</sup> Hill, 'Reform of Commonwealth Environment Legislation': Consultation Paper Issued by Senator the Hon. Robert Hill Commonwealth Minister for the Environment, (Department of the Environment, 1998), chapters 2 and 3.

This was widely regarded as a fundamental deficiency. Proposed new legislation would promote implementation of the principles of ESD through an efficient EIA scheme.

At this point, however, the Government had already formally defined the ‘principles of ESD’, in near-identical terms to the ‘core objectives and guiding principles’ of the NSESD, in s 21 of the *Natural Heritage Trust of Australia Act 1997* (Cth), which required Ministers making grants from an environmental fund to have regard to the principles of ESD as defined. The broader policy context for this approach was that the proposed laws should reflect both the NSESD and the IGAE, although the attempt at reconciling the two instruments by arguing that the IGAE required the Commonwealth and States to implement the principles of ESD in all decision-making, while the NSESD set out an agreed framework under which governments were to make decisions and take actions in pursuit of that goal, glosses over the inconsistencies between the two documents.<sup>1177</sup>

The major focus of the proposed Environment Protection Act would be to ensure that environmental factors were efficiently integrated within the development process, especially through an environmental impact assessment regime. Under that regime, approval decisions would be based on ESD principles, with proper regard being given to economic and social factors. Clause 136 of the Bill, discussed below, would reflect this approach. Despite the apparent emphasis on a decision-rules approach, the paper also addressed the planning context for EIA, although the reality of the federal division of responsibilities seemed to be pushing the need for EIA to operate in a planning context down from ‘important’ to ‘desirable’: while the consultation paper argued that best practice environmental management required a greater focus on early, strategic planning, in light of State primacy in land planning and management, the Commonwealth would focus early strategic planning initiatives on ‘key areas’ such as World Heritage properties. This would complement the Commonwealth’s commitment under the Biodiversity Strategy to progress bioregional planning across Australia.

While there is a degree of inconsistency in language, the effect of the proposal at this point was to provide for a default project-approval process with decisions ‘based on’ ESD principles, while also promoting bioregional planning that would ‘significantly reduce’ the need for Commonwealth involvement in project approvals in a planning context, one that

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<sup>1177</sup> See 3.4.

included provision for bioregional planning.<sup>1178</sup> There was however some ambiguity or ambivalence as to the conception of sustainability, due in part to a failure to define ESD. On the one hand, the discussion paper states that the law would promote ESD through policy integration, suggesting a Policy Tier Two or Three approach. On the other hand, the references to safeguarding the welfare of future generations and the calling up of the NSESD definition of ESD with its 'core objectives' of pursuing a path of economic development that would maintain ecological processes and safeguard the welfare of future generations suggest an upper Policy Tier Five approach.

### *ESD in the Bill as Introduced*

As introduced, the Bill reflected the approach discussed above. The objects of the bill included 'to promote [ESD] through the conservation and ecologically sustainable use of natural resources'.<sup>1179</sup> The main decision-making provision was clause 136, which required the minister to have regard to the 'principles of [ESD]' in deciding whether to approve a development project following EIA. The clause defined the principles of ESD in the same terms as the *Natural Heritage Trust of Australia Act* — ie in conformity with 'core objectives' and 'guiding principles' from the NSESD, but without its goal statement.<sup>1180</sup>

### *Senate Committee Report*

The Bill was referred to a Senate legislation committee, where its ESD-related provisions attracted considerable attention. The Committee received numerous submissions calling for a strengthening of the objects, generally to the effect that 'the objects clause be amended by deleting the hortatory words "to provide for" [protection of the environment] and "to promote" [ESD] and replacing them with outcome-oriented terms such as "to protect" and "to ensure"'.<sup>1181</sup> Other submissions considered that the Bill did not adequately implement

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<sup>1178</sup> The proposal also promoted strategic assessments, although it emphasised the efficiency rather than environmental benefits of SEA: *ibid* 16–17.

<sup>1179</sup> Cl 3(1)(b).

<sup>1180</sup> See cl 136(3). The definition of ESD in that clause was ended to other sections that referred to the 'principles of [ESD]' through a 'whole of Act' definition in clause 528. There were variants of ESD in the Bill (and which remain in the Act), including the term 'ecologically sustainable use', but these are not relevant here. For completeness, cl 391 (later enacted) requires the Minister to 'take account' of the precautionary principle in making certain decisions under the Act, including decisions whether or not to approve a development project. At least in its application to development decisions, the clause appears to add nothing to the requirements of cl 136 and so is not further discussed here.

<sup>1181</sup> Senate Environment, Communications, Information Technology and the Arts Legislation Committee, 'Environment Protection and Biodiversity Conservation Bill 1998 and Environmental Reform (Consequential



the principles of ESD, with the National Environmental Law Association arguing, for example, that the principles of ESD had been incorporated ‘in an almost token fashion’.<sup>1182</sup> The Committee majority was dismissive of such arguments.<sup>1183</sup>

A dissenting report by the Democrats, highlighted here because it provided a platform for negotiated amendments to the Bill, raised concerns with the implementation of ESD in two respects.<sup>1184</sup> The first was that ESD should be defined more rigorously and that the objects should place ‘[ESD] and its principles at centre stage’.<sup>1185</sup> The second was that ESD had been ‘contorted somewhat’ through the adoption of a definition derived from the NSESD, with the result that, while its rhetoric was used, its intention was not. For example, the precautionary principle and public involvement were identified as ‘guiding principles’, rather than core objectives.<sup>1186</sup> Further:

The Bill treats ESD as though it means that environmental issues take second place to economic and social issues. For example, while the bill requires decisions on environmental approvals to take *all* economic and social considerations into account, ESD principles (such as they are) only need to be taken into account in relation to the particular matter which triggers assessment (clause 136). In effect, the bill ensures that economic and social factors are incorporated into environmental decisions, but does not require environmental factors to be part of social or economic decision-making.<sup>1187</sup>

Apart from generating a platform for amendment, the significance of the Senate committee process is to highlight that although various stakeholders were concerned about the implementation of ESD through the EIA scheme in the Bill and could articulate criticisms, no-one advanced a comprehensive alternative model.

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Provisions) Bill 1998: Report of the Senate Environment, Communications, Information Technology and the Arts Legislation Committee, April 1999’ (The Senate, 1999) 35–36 (*‘Senate Committee Report’*).

<sup>1182</sup> Ibid 174, quoting Submission 522 from the National Environmental Law Association, at 2. In a similar vein, the Committee quoted oral evidence from Professor Janet McDonald (at 35–36) that merely providing for or promoting ESD as the object of the Bill was insufficient — the object of the Bill ‘should to actually achieve those outcomes ...’

<sup>1183</sup> Ibid 174–175.

<sup>1184</sup> Ibid 197–198. There were three dissenting reports, authored respectively by the Australian Labor Party, the Australian Democrats, and the Australian Greens with the Greens WA (‘the Greens’). Labor argued that the Bill had major deficiencies and should not proceed, pending resolution of 15 listed issues. The Democrats argued for amendments to address their concerns, while the Greens’ report, although overlapping with the Democrats’ report, argued that the Bill was fundamentally flawed and should be withdrawn. The third minority report, from the Labor Party, did not mention ESD directly, but called for ‘adequate clarity and certainty’ in respect of a number of matters, including definitions and objects clauses.

<sup>1185</sup> Ibid 202, 214, 216–217. The minor differences in wording between the two dissenting reports on this topic are not significant here.

<sup>1186</sup> Ibid 200, 201.

<sup>1187</sup> Ibid (original emphasis).

*Government Response to Report*

The Government did not table a response to the committee report, but the department's advice to the Environment Minister in response to the minority recommendations on ESD is of interest as it can be seen as setting parameters within which subsequent negotiations on amendments would occur. While the Government would later agree to amendments to the ESD provisions without recording the reasoning behind the amendments, those amendments were not inconsistent with this advice:

Ecologically sustainable development is already an explicit object of the Bill, included in clause 3 (1)(b).

ESD principles must be considered in the making of a range of decisions under the bill. The principles set out in the bill are taken directly from the [NSESD] ... These principles do not subordinate environmental considerations to economic and social considerations, as the minority report claims, but seek to achieve environmental outcomes in ways which also advance economic and social goals.

The "qualifications" in wording of the object (to *provide for*, to *promote*) reflect the fact that it is unrealistic to expect the Bill, by itself, to comprehensively protect the environment, achieve [ESD] or conserve biodiversity. These objectives can only be met through the concerted efforts of all governments and sectors of the community.<sup>1188</sup>

The advice did not canvass the more fundamental issues of defining ESD or whether ESD can be promoted simply by making ESD principles mandatory considerations in discretionary decision-making.

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<sup>1188</sup> Department of the Environment and Heritage, Assistant Secretary, Legislation and Environmental Data Branch, 'The Environment Protection and Biodiversity Conservation Bill 1998: Senate Committee Enquiry Report', brief to minister, 11 May 1999 (Department of the Environment and Heritage file 99/03980). The Minister's response to this recommendation is not on file but the Government's approach and the Bill as enacted are consistent with this advice.

*Negotiated Amendments to Bill*

The Government negotiated 440 amendments with the Democrats to secure their support to pass the bill.<sup>1189</sup> Those amendments did not include any relevant changes to the objects clause but did include the replacement of the NSESD-conforming definition of the principles of ESD with a definition which is closer to the IGAE. The principles were also moved to the front of the Act, presumably to reinforce their perceived general application.<sup>1190</sup>

The only indication on the files as to the intention behind the amendments lies in the brief details of agreement sent by the Minister's office to the Department:

Proposed Amendment

amend the definition of 'the principles of ecologically sustainable development' (*taking into account NSW definition*).

– However, it will still be necessary to take into account economic and social factors when making approval decisions.<sup>1191</sup>

This latter qualification was complied with by leaving the reference to economic and social matters in s 136(1)(b). Presumably the Government's objective here was to maintain the prominence and strength of the requirement for policy integration, as the omission of this paragraph would have downgraded economic and social matters from something to be 'considered' to become something merely to be 'taken into account' as one element of the ESD principles under s 136(2)(a). The remainder of the note makes it clear that the NSW definition was influencing thinking, but not in what respect: the NSW definition follows the IGAE definition closely but the difference between the two approaches was not analysed.<sup>1192</sup>

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<sup>1189</sup> Stewart Smith and NSW Parliamentary Library Research Service, 'New Commonwealth and State Government Environment Relationships' (NSW Parliament 1999) 10; Lyn Allison, 'Policy wins over politics: Democrats, conservationists achieve dramatic upgrade in environmental protection measures', *Media Release*, 22 June 1999 (Office of Senator Lyn Allison).

<sup>1190</sup> See s 3A of the EPBC Act. This section is reproduced in 7.5.1.

<sup>1191</sup> Office of Minister Hill, 'Additional Matters', email to department 15 June 1999, (Department of the Environment and Heritage file 99/5008), attachment. From the very brief form of the relevant email, it is unclear whether the proposal to the principles of ESD in the form in which they appeared in the Bill — in a stand-alone section under the chapeau 'the following are principles of ecologically sustainable development' — came from the department or the minister's office (Office of Minister Hill, 'Comments', email to Department of the Environment and Heritage, 17 June 1999 (Department of the Environment and Heritage file 99/5008)).

<sup>1192</sup> Bates states that the form of the principles in NSW follows the NSESD (Gerry Bates, *Environmental Law in Australia* (LexisNexis Butterworths, 9<sup>th</sup> ed, 2016) 264) but s 6(2) of the *Protection of the Environment*

*Outcome of Negotiated Changes to Definition of ESD Principles*

The politics of the negotiations are beyond scope here but from the safe assumption of a general pro-environmental stance on the part of the Democrats, they may have seen the removal of principles referring expressly to the need for a strong economy and international competitiveness as shifting the balance between economic and environmental considerations towards the latter. Even if this is correct, from that same perspective the effective downgrading of 'core objectives' concerning intergenerational welfare and the maintenance of biodiversity and ecological processes to the status of principles appears to represent an overall weakening of the definition of ESD. Yet the more important question is the extent to which the redefining of the principles was likely to affect outcomes. In light of the argument made later in this chapter, that as mandatory considerations the principles of ESD have limited scope to promote ESD through approval decisions, the outcome of the parliamentary negotiations for the general model of promoting ESD appears to have been change without policy impact.<sup>1193</sup>

## **7.4 Does the *EPBC Act* Environmental Impact Assessment Process Advance the Goal of ESD?**

The weak forms in which both the planning-context and decision-rule models were included in the *EPBC Act* suggest that the Act cannot promote ESD through project-approval decisions, a proposition that is tested below by examining how the two decision-making models operate. That discussion begins by considering the way in which ESD principles were applied to the EIA scheme in the Bill as enacted and then considers the operation of the two decision-making models in turn.

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*Administration Act 1992* (NSW) (a new definition substituted in 1996 by the *Protection of the Environment Operations Act 1997* (NSW)), clearly follows the IGAE closely.

<sup>1193</sup> Note that this negotiated decision-making structure vis-à-vis ESD and EIA remains in place today, unaffected by either of the two major amending bills to the EPBC Act: the *Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 2001* (Cth) (No 82, 2001); *Environment and Heritage Legislation Amendment Act (No. 1) 2003* (Cth) (No 88, 2003); *Environment and Heritage Legislation Amendment Act (No. 1) 2006* (Cth) (No 165, 2006).

### 7.4.1 Incorporation of ESD and Other Considerations into the EIA Scheme in the Bill as Enacted

The Bill as enacted gave prominence to ESD by including it in the objects clause, followed immediately by a new section setting out the principles of ESD, as set out in Box 7.4.

#### Part 1 — Preliminary

...

#### 3 Objects of Act

(1) The objects of this Act are:

(a) ...

(b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources;

...

#### 3A Principles of ecologically sustainable development

The following principles are principles of ecologically sustainable development:

(a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;

(b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

(c) the principle of inter-generational equity — that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

(d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

(e) improved valuation, pricing and incentive mechanisms should be promoted.

#### Box 7.4 General ESD-Related Provisions of *EPBC Act* Relevant to EIA Scheme

The key provisions of the EIA scheme are found in Part 9 Division 1, entitled ‘Decisions on approval and conditions’. In that part, s 130 requires the Minister to decide whether or not to approve a ‘controlled action’ (for present purposes, a development project under assessment).<sup>1194</sup> Section 133 makes it clear that this is a discretionary decision to be taken once the minister receives the relevant ‘assessment documentation’, which for present purposes, consists of an EIS and the Environment Department’s ‘recommendation report’, which must include recommendations on whether the proposed action should be approved and if so any conditions that should be attached to that approval.<sup>1195</sup> In exercising that

<sup>1194</sup> There is an extended definition of ‘action’ in Part 23, Division 1, Subdivision A, but for present purposes the key provision is s 523, which defines ‘action’ as including a ‘project’, a ‘development’ and an ‘undertaking’.

<sup>1195</sup> See s 133(8). If the proposed action has been assessed by Inquiry, the report that must be considered is the Inquiry report.

discretion, the minister must have regard to certain general considerations in s 136, together with certain considerations specific to particular MNES, in ss 137A–140.<sup>1196</sup> The general considerations and an example of an MNES-specific consideration, relating to World Heritage places, are set out in Box 7.5.

## **Part 9—Approval of actions**

### **Division 1—Decisions on approval and conditions**

...

#### **Subdivision B—Considerations for approvals and conditions**

##### **136 General considerations**

###### *Mandatory considerations*

- (1) In deciding whether or not to approve the taking of an action, and what conditions to attach to an approval, the Minister must consider the following, so far as they are not inconsistent with any other requirement of this Subdivision:
- (a) matters relevant to any matter protected by a provision of Part 3 that the Minister has decided is a controlling provision for the action;
  - (b) economic and social matters.

###### *Factors to be taken into account*

- (2) In considering those matters, the Minister must take into account:
- (a) the principles of ecologically sustainable development ...  
[Paragraphs (b) to (d) refer to assessment documentation]
  - (e) any other information the Minister has on the relevant impacts of the action ...
- ...

###### *Minister not to consider other matters*

- (5) In deciding whether or not to approve the taking of an action, and what conditions to attach to an approval, the Minister must not consider any matters that the Minister is not required or permitted by this division to consider.

##### **137 Requirements for decisions about World Heritage**

In deciding whether or not to approve, for the purposes of section 12 or 15A, the taking of an action and what conditions to attach to such an approval, the Minister must not act inconsistently with:

- (a) Australia's obligations under the World Heritage Convention; or
- (b) the Australian World Heritage management principles; or
- (c) a plan that has been prepared for the management of a declared World Heritage property under section 316 or as described in section 321.

#### **Box 7.5 Sections from Part 9 Division 1 *EPBC Act***

<sup>1196</sup> The sections relate to the following MNES: World Heritage properties (s 137); Ramsar wetlands (s 138); listed threatened species and endangered communities (s 139); and migratory species (s 140). Section 140A, directing the minister not to approve certain nuclear installations, is not considered here because nuclear actions are not an element of the environment.

The first mandatory consideration directs the minister to consider relevant environmental impacts.<sup>1197</sup> The other mandatory considerations are ‘economic and social matters’.<sup>1198</sup> The ‘mandatory considerations’ requirement is thus a mechanism for policy integration. A key distinction however is that the environmental matters will be identified through a prescribed environmental *assessment*, while there is no such requirement for economic and social matters.<sup>1199</sup> Typically, the Minister’s department assembles economic and social material in preparing its statutory recommendation report.<sup>1200</sup>

In addressing these mandatory considerations, the Minister must then take various matters listed in s 136(2) into account; most of the paragraphs in that sub-section simply point to the relevant assessment documentation and need no further consideration. For present purposes, s 136(2) reduces to an obligation to consider three things: the principles of ESD; the EIS; and the departmental recommendation report.<sup>1201</sup> Finally, by excluding other matters from consideration, sub-s (5) has the effect of declaring Division 1 to be a decision-making code. The MNES-specific provisions that follow, such as s 137 on World Heritage, all conform to a narrow ‘not inconsistent’ test, but otherwise fall into four classes: the Minister must not act inconsistently with an international obligation, a management principle, a statutory plan, or a threatened species conservation advice.

As to international obligations, the High Court has noted generally that the provisions of international agreements are often ‘more aptly described as goals to be achieved rather than rules to be obeyed’ and thus may be too general to create a circumstance of inconsistency in relation to a specific development.<sup>1202</sup> The Federal Court applied this decision in rejecting an argument in *Australian Conservation Foundation Incorporated v Minister for the Environment* (‘*Adani Case*’) that the Environment Minister’s approval of a coal mine and associated infrastructure was inconsistent with the World Heritage Convention because the carbon emissions from the mining and consumption of the coal would harm the climate

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<sup>1197</sup> S 136(1)(a).

<sup>1198</sup> S 136(1)(b).

<sup>1199</sup> This is despite the fact that economic and social impact assessments are recognised forms of impact assessment: see Elliott and Thompson, *Environmental Impact Assessment in Australia: Theory and Practice*, above n 1104, 36 *et seq*; 50 *et seq*; 74 *et seq*.

<sup>1200</sup> There are several parallel provisions relating to recommendation reports, each associated with a provision dealing with a particular level of EIA: see ss 93(5), 95, 100, 105.

<sup>1201</sup> See s136(3). The requirement in s 136(4) to have regard to the proponent’s ‘environmental history’ can be set aside here because it relates to the applicant and not the proposed action.

<sup>1202</sup> *Project Blue Sky Inc v Australian Broadcasting Authority* (1998) 194 CLR 355 at 392, (McHugh, Gummow, Kirby and Hayne JJ).

and thus the World Heritage-listed Great Barrier Reef.<sup>1203</sup> In rejecting this argument the Court held that the Convention gave considerable latitude to state parties as to how they would comply with their obligations and thus that the relevant articles, including the obligation under article four that Australia 'do all it can ... to the utmost of its own resources' to discharge its duty to 'ensur[e] the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage' should not be interpreted literally but as creating a duty not to act in a manner 'manifestly contrary' to the Convention.<sup>1204</sup> The Court also found that compliance with the Convention was not a jurisdictional fact, which meant that the question of inconsistency was a matter for the Minister to form a view upon (on proper legal grounds) rather than a matter of objective fact for the court.<sup>1205 1206</sup>

As to management principles, Division 1 also directs the minister not to act inconsistently with (prescribed) management principles for World and National Heritage places.<sup>1207</sup> These are cast at a high level of generality. For example, clause 3.04 of the Australian World Heritage management principles merely reflect the World Heritage Convention in stating that '[a]n action should not be approved if it would be inconsistent with the protection, conservation, presentation or transmission to future generations of the World Heritage values of the property'.<sup>1208</sup> The principles also contain material that repeats other legislative provisions or is administrative in nature. Although there is no case law directly in point, the general nature of the principles (and in the case of World Heritage, the direct link between the principles and the convention) suggests that, like international agreements, they are more goals to be achieved rather than rules to be obeyed. Similarly, these principles seem analogous to 'approved conservation advice' making the Federal Court's reasoning about jurisdictional facts applicable. Considered in light of the traditional reluctance of courts to intervene in the exercise of administrative discretions,<sup>1209</sup> it seems likely that the courts

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<sup>1203</sup> (2016) 251 FCR 308. Note that this decision was appealed to the Full Court of the Federal Court but not on this ground.

<sup>1204</sup> Ibid [197]–[200].

<sup>1205</sup> Ibid [201].

<sup>1206</sup> The Federal Court had earlier held in *Northern Inland Council for the Environment Inc v Minister for the Environment and Another* (2013) 218 FCR 219 that another provision in Division 1, the requirement in s 139(2) for the minister to consider an 'approved conservation advice', required where a proposed development was likely to have a significant impact on a listed threatened species, did not create a jurisdictional fact.

<sup>1207</sup> These are the Australian World Heritage Management Principles and the National Heritage management principles, provided for under the *EPBC Act*, ss 323 and 324Y respectively.

<sup>1208</sup> *Environment Protection and Biodiversity Conservation Regulations* 2000 (Cth), Schedule 5.

<sup>1209</sup> See for example Peter Cane and Leighton McDonald, *Principles of Administrative Law: Legal Regulation of Governance* (Oxford University Press, 2008) 13–14.



would apply a similar ‘manifestly contrary’ criterion in a challenge based on inconsistency with prescribed management principles.

Division 1 directs the minister not to act inconsistently with certain statutory plans. (Conservation advices are treated here as analogous to plans, as both contain information concerning what could be done to stop the decline, or support the recovery, of a listed species or ecological community.)<sup>1210</sup> In the case of threatened species and ecological communities, these are approved recovery plans and threat abatement plans, all prepared (as are conservation advices) with the advice of the Threatened Species Scientific Committee, an expert body.<sup>1211</sup> For World and National Heritage places, which are protected areas, these provisions also direct the minister not to act inconsistently with a plan of management for the area.<sup>1212</sup> Following the relevant case law, inconsistency with these plans is unlikely to be a jurisdictional fact. Further, in the absence of legal authority it would again be reasonable to expect the courts to grant the Minister leeway to form a view about inconsistency, subject to a ‘manifestly contrary’ test, on the ground either that the scientific or management-related content of these instruments is either based on expertise that is more within the knowledge of the Minister and his departmental advisers than it is of the courts, or, where it is general in nature, by analogy with the general nature of international agreements.

The *EPBC Act* also contains provisions corresponding to the MNES-specific provisions of Part 9 Division 1 for wetlands recognised under the Ramsar Convention (‘Ramsar wetlands’); while there are no corresponding provisions solely for migratory species or protected marine species, the provisions for wildlife conservation plans also correspond to the MNES-specific protections. However, both these provisions sit outside Part 9 Division 1, raising the question of whether s 136(5) excludes them from consideration in an approval decision.<sup>1213</sup> Finally, in relation to bioregional plans, sub-s 176(5) of the Act provides that:

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<sup>1210</sup> Note the similarities between s 266B(2)(b) concerning conservation advice and s 270(1). The similarities exist because the purpose of amending the Act to provide for conservation advice was to ‘facilitate more timely recovery action’ by requiring conservation information to be available at the time of listing, rather than at the later point when a recovery plan might be made: see Explanatory Memorandum, Environment and Heritage Legislation Amendment bill (No 1) 2006 (Cth), [250].

<sup>1211</sup> Part 13 division 5 subdivision A provides for these plans; conservation advices are prepared under subdiv AA.

<sup>1212</sup> The relevant plans are prepared under ss 316, 321, 324S or 324X.

<sup>1213</sup> See ss 334 (Ramsar Wetlands) and ss 285 and 286 (dealing with Wildlife Conservation Plans, which can provide for migratory species, among others). Note that s 286 is in the form ‘A Commonwealth agency [which is defined in s 528 to include a minister] must take all reasonable steps to act in accordance with a wildlife conservation plan’; the form of the corresponding provisions is ‘The Minister must not act

- (5) Subject to this Act, the Minister must have regard to a bioregional plan in making any decision under this Act to which the plan is relevant.

The qualification 'subject to this Act' means that s 136(5) will operate to exclude consideration of bioregional plans in project-based approval decisions, except, applying s 136(3)(e), to the extent that the plan constitutes 'any other information that the Minister has on the relevant impacts of the action'. For example, if a bioregional plan identified an area as containing high environmental values for conservation, the Minister could recognise the high values as a fact but would have to disregard the normative import of any designation in the plan for conservation.

#### 7.4.2 The Planning and Policy Context for EIA Under the EPBC Act

In contrast to the states, which have primary constitutional responsibility for planning and land (including environmental) management and operate general urban and regional planning schemes,<sup>1214</sup> there is no Commonwealth planning system per se and there is thus no ready-made land-use planning context in which a Commonwealth EIA scheme could operate.<sup>1215</sup> Instead, the EPBC Act makes significant provision for *environmental* planning instruments of various kinds; however, most of these are discretionary and where the instruments are geospatial, they must be prepared in cooperation with the relevant state, except in Commonwealth areas.<sup>1216</sup> In practice, the use of geospatial environmental planning instruments under the Act has been limited, the primary examples being four bioregional plans for parts of the Commonwealth marine area.<sup>1217</sup>

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inconsistently with' a relevant plan. For present purposes, to 'act in accordance with' is at least as strong as 'not act inconsistently with'.

<sup>1214</sup> See for example *Planning and Environment Act 1987* (Vic) where environmental provisions are incorporated into the general planning scheme.

<sup>1215</sup> In contrast to environmental matters, the Commonwealth has not attempted to construct such a role based on indirect constitutional powers.

<sup>1216</sup> For conservation plans see part 12 div 2; for protected areas see for example, in relation to World Heritage areas, pt 15 div 1 sub-div E. 'Commonwealth areas' are defined in s 525 of the *EPBC Act* and include various areas of exclusive Commonwealth jurisdiction including Commonwealth-owned land and the coastal sea.

<sup>1217</sup> The 'Commonwealth marine area' is the area of exclusive Commonwealth jurisdiction that can be described broadly as the waters inside Australia's exclusive economic zone but beyond the 3 nautical mile coastal zone (see s 24 *EPBC Act*). There are no statistics on the extent to which the Commonwealth has discharged its 'best endeavours' duty to facilitate State plans for migratory species, World Heritage places, National Heritage places, Ramsar Wetlands, as required by ss 285(5), 321, 324X, and 333.

The various policy and planning instruments provided for in the Act are described in Table 7.1, which includes information as to whether it is compulsory to have a plan, and then to comply with it.<sup>1218</sup>

<b>Type of Environmental Planning Instrument</b>	<b>Function</b>	<b>Is the Plan Geospatial?</b>	<b>Is the Plan Mandatory or Discretionary?</b>	<b>Mandatory to comply with plan in EIA Decisions?</b>
Bioregional Plan (Pt 12 div 2)	Various, including conservation of biodiversity and its relation to economic and social values	Yes	Discretionary	Must not consider, except as information
Threatened Species Recovery Plan (Pt 13 div 5 sub-div A)	Research and management actions to maximise chances of long-term survival of threatened species or ecological community (EC)	Can have geospatial aspects	Discretionary (mandatory until 2006)	Must not act inconsistently with plan
Threat Abatement Plan (Pt 13 div 5 sub-div A) <sup>1219</sup>	Research and management actions to reduce the effect of a 'key threatening process' on threatened species or EC	Can have geospatial aspects	Discretionary	Must not act inconsistently with plan
Wildlife Conservation Plan (Pt 13 div 5 sub-div B)	Research and management actions to support survival of the migratory species, marine species, cetaceans or conservation-dependent species	Can have geospatial aspects	Discretionary	Unclear

<sup>1218</sup> The table does not include plans that do not provide contextual information for environmental approval decisions. For example, when a plan of management for a fishery is accredited under s 265, this has the effect only of declaring that an action provided for in the plan does not constitute an offence under provisions related to killing, injuring or taking marine species (see s 255).

<sup>1219</sup> The Register of Critical Habitat under s 207A has some resemblance to a threat abatement plan in that it is likely to create a de facto 'conservation zone'.

Protected Area Management Plans (Pt 15)	Promote management of protected areas to protect values, eg World Heritage, Ramsar	Yes	Mandatory (in Cth areas) To be promoted in other areas	Must not exercise powers inconsistently with plan. Unclear for Ramsar sites
<b>Table 7.1 Plans and Policies Under <i>EPBC Act</i> Relevant to Environmental Approval Decisions<sup>1220</sup></b> (Source: the author)				

The table indicates that some plans are capable of including geospatial elements, although this is not a requirement. For example, the recovery plan for Carnaby's cockatoo, a species endemic to the region around Perth, makes only general statements about critical habitat, even though threatened species recovery plans could surely meet the requirement to 'identify' critical habitat by mapping.<sup>1221</sup> This is because:

there is inadequate information to provide for robust quantification across the species range detailing which habitat could be lost without having a significant adverse impact on the Carnaby's cockatoo population in the long term.<sup>1222</sup>

### 7.4.3 Approach of the EPBC Act to the 'Planning Context' Model

Although nothing necessarily turns on whether plans are inherently geospatial, the distinction between geospatial and other plans provides a convenient division for analysis

#### *Geospatial Plans and Development Approval Decisions under EPBC Act*

There are two types of geospatial plans under the EPBC Act, bioregional plans and protected area management plans.<sup>1223</sup> Bioregional plans are comprehensive instruments and have the potential to be the centrepiece in a system of plans and indeed the explanatory

<sup>1220</sup> Note also that conservation agreements are capable of being applied at scale and can be used to exempt a development from the need for approval, although more typically they are negotiated on a case by case basis and so are not planning or policy instruments per se. See pt 14, especially s 306A.

<sup>1221</sup> S 270(2)(d).

<sup>1222</sup> Department of Parks and Wildlife, 'Carnaby's Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan', Western Australian Wildlife Management Program No. 52 (Department of Parks and Wildlife 2013) 12–13.

<sup>1223</sup> The Register of Critical Habitat under s 207A resembles a plan in some respects but is not a plan because it does not embody any statement of intent. Rather, it is simply a register of maps that act as a point of reference for several other provisions, including the offence under s 207B of knowingly damaging critical habitat.

memorandum to the EPBC Bill explained that a bioregional plan ‘provides a “blueprint” for the ecologically sustainable management of natural resources within a bioregion, taking into account social and geographic elements.’<sup>1224</sup> Beyond the obvious function of identifying the components, distribution and conservation status of biodiversity,<sup>1225</sup> bioregional plans can include objectives, priorities, strategies and actions relating to biodiversity values, while also providing for monitoring and review.<sup>1226</sup> They can also include provisions about heritage values of places and ‘important economic and social values’.<sup>1227</sup> Despite their potential, bioregional plans have been little used, with only four having been made to date, all for marine areas.<sup>1228</sup> The likely reason for this limited use is that for areas in a state or territory (ie most of terrestrial Australia) such plans require the cooperation of the relevant government, potentially adding political and financial complexity to scientific and policy complexity.<sup>1229</sup>

The Act also provides for management plans for protected areas. For areas under Commonwealth jurisdiction, the minister must make a plan, but for places under state jurisdiction (ie most places) this is only a ‘best endeavours’ requirement.<sup>1230</sup> Plans must not be inconsistent with relevant conventions or with ‘management principles’ prescribed under the Act (eg the ‘Australian World Heritage management principles’ for World Heritage properties). The management principles contain some requirements for plans, for example that plans for Ramsar wetlands should describe their ecological character and what must be done to maintain that character, including providing for restoration.<sup>1231</sup> The exception to this scheme is the Great Barrier Reef Marine Park, which is governed by its own Act, including provision for zoning plans and directions that the Park be managed consistently with World Heritage values.<sup>1232</sup>

#### *Plans Related to Species and Ecological Communities*

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<sup>1224</sup> *Explanatory Memorandum*, EPBC Bill, 63. The capacity to make a wildlife conservation plan for a conservation-dependent species (s 285(1)(d)) was included as part of the package of amendments made during the passage of the bill and described in 8.3.3. below.

<sup>1225</sup> Section 176(4)(a).

<sup>1226</sup> Section 176(4)(c)–(f).

<sup>1227</sup> Section 176(4)(b)–(ba).

<sup>1228</sup> The plans cover four marine regions - South-west, North-west, North and Temperate East: see <http://www.environment.gov.au/marine/marine-bioregional-plans> (viewed on 29 August 2018).

<sup>1229</sup> Section 176(2).

<sup>1230</sup> See for example s 322 in relation to World Heritage properties.

<sup>1231</sup> *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth), reg 10.102, schedule 6.

<sup>1232</sup> *Great Barrier Reef Marine Park Act 1975* (Cth), s 7(3)(c); Part V Division 2.

The Minister can make Recovery Plans and Threat Abatement Plans for threatened species and ecological communities, and Wildlife Conservation Plans for listed migratory or listed marine species, and conservation-dependent species.<sup>1233</sup> Between them, these plans have the potential to cover most terrestrial and marine native species that attract some level of conservation concern.<sup>1234</sup> Recovery Plans provide for 'the research and management actions' necessary to stop the decline, and support the recovery, of threatened species and ecological communities, including identifying critical habitat or populations under particular pressure.<sup>1235</sup> Threat Abatement Plans must also identify research, management and other actions, but in this case 'to reduce the key threatening process concerned to an acceptable level', so as to maximise the chances of long-term survival of the species or community concerned.<sup>1236</sup> Wildlife conservation plans also provide for the research and management actions, in this case to support survival of listed migratory species, listed marine species (ie native species) and cetaceans.<sup>1237</sup> In making all of these plans, the minister must have regard to objects of the Act.<sup>1238</sup> The minister may also adopt conforming state plans.<sup>1239</sup>

#### *Relevance of Plans to Project-Approval Decisions*

The analysis above shows that Part 9 Division 1 creates two tiers of decision rules in relation to plans. Leaving aside for the moment cases where the position is unclear (Ramsar sites, migratory, listed marine and conservation-dependent species) the division requires that if there is a specific plan under the Act for a MNES, the minister must not contravene it in approving a development. The second tier relates to plans that provide for conservation more generally. In this instance the minister must not have regard to these plans at all, again except to the extent that the plan is a source of information about impacts of the development. Although the legal position for Ramsar site principles and plans and for wildlife management plans covering MNES is unclear, there seems no coherent policy reason for these differences. It may be therefore that they represent policy or drafting errors. As to the exclusion of bioregional plans from the 'not inconsistent'

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<sup>1233</sup> Part 13, Div 5, sub-divs A, B. The List of Marine Species declared under s 248 includes several hundred marine species, including birds, but does not include fish other than pipefish. The Minister can also enter into Conservation Agreements under Part 14; even though these agreements can deal with the protection or conservation of MNES in ways that might overlap with the content of the plans discussed here, Conservation Agreements are not discussed here because they are specific to the parties and thus do not manifest any policy intent.

<sup>1234</sup> Fish that are harvested are likely to be managed under separate fisheries legislation.

<sup>1235</sup> See section 270.

<sup>1236</sup> Section 271.

<sup>1237</sup> Ss 285, 287.

<sup>1238</sup> Sections 270(3)(a); 271(3)(a); 287(3)(a).

<sup>1239</sup> Ss 270(7); 270B(7); 292.

requirement applying to MNES, it is unclear whether this too is an unintended difference, or whether, for example, they are excluded because of their greater generality, against a policy intention that only a clear inconsistency with a specific measure to conserve MNES should prevent the Minister from approving a development if otherwise minded to do so.

Plans thus have an equivocal status under the Act. They guide conservation of important environmental matters but their role in informing approval decisions is confined to avoiding direct conflict with something specified in the plan, and to providing information to supplement an EIA, but only where the information relates to impacts. This confines the spatial planning model severely. Nevertheless, within certain limitations such as the need for State cooperation, the Commonwealth *could* use these instruments to construct a comprehensive environmental planning scheme under the Act, albeit for purposes that, from a policy perspective, are artificially constrained.

#### **7.4.4 Approach of EPBC Act to the Decision Rules Model**

The literature review in 7.3 showed that, with an ESD goal interpreted as being on Policy Tier Five, the decision rules model requires an environmental informational context. This section considers the extent to which the EPBC Act conforms to this model by providing that context and establishing decision rules. It argues that even where contextual information is available, the Act confines its use, as with plans, to the narrow scope of project impacts. In relation to decision ‘rules’ themselves, construed broadly here to include mandatory considerations, the section makes two broad arguments. First, the only true decision rules in the Act are narrow and prohibitory, requiring for example that decisions not be inconsistent with an international convention. Second, the remaining decision rules, the principles of ESD, have limited scope for operation, even where a decision-maker wished to apply them expansively in pursuit of the object of the Act of promoting ESD, because most of them are not fit for purpose, having been formulated to inform policy formulation or guide its implementation, rather to inform individual regulatory decisions.

##### *Information Framework Relevant to ELA Scheme*

Although the provisions of the EPBC Act dealing with environmental information are mostly specific to EIA and other regulatory functions, Part 12 Division 1 of the Act contains general provisions for identifying and monitoring biodiversity. The general scheme of this division is to empower the Commonwealth to cooperate in and give financial

assistance for biodiversity identification and monitoring, except in relation to areas of exclusive Commonwealth jurisdiction, in which case the division establishes a fairly narrow capacity to prepare inventories of species or undertake surveys of certain marine species.<sup>1240</sup> While there is no mention of the purpose of these provisions, conceivably they might be used in support of bioregional planning.<sup>1241</sup>

When it comes to informing decisions whether to approve development projects, the issue is not the availability of information but the extent to which available information can be drawn upon. Section 136 directs the minister to two main sources: the EIS, which is confined to information about the action and its relevant impacts,<sup>1242</sup> and the departmental recommendation report, which contains advice about whether the project should be approved having regard to the matters the minister must consider, the most important of these being assessed impacts, economic and social matters and the principles of ESD.<sup>1243</sup> While section 136(2)(e) also directs the minister to take into account 'any other information the Minister has on the relevant impacts of the action', and gives the example of information from a strategic assessment under Part 10, this provision is narrowly cast.

If the Act sought to implement a decision-rules model, it could be expected to provide for a comprehensive information framework linked directly to the EIA scheme, but it does not. To the extent that the Act does provide for biodiversity monitoring, it confines the use of this information to assessing the impacts of a development project. This is consistent with the narrow approach of the Act to plans. The minister must be fully informed about the environmental impacts of a development project through EIA, but little more.

### *Decision Rules*

The Act contains a number of provisions that are clearly decision rules, some directed to outcomes and some requiring that certain things be considered. The decision rules specific to MNES were discussed above; plans aside, the key decision rules are to 'have regard' to

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<sup>1240</sup> See ss 171–173.

<sup>1241</sup> Of course, any amount of environmental information could be available apart from what is facilitated by these provisions.

<sup>1242</sup> See *EPBC Act*, s 101A.

<sup>1243</sup> There are several parallel sections in relation to different levels of EIS, but for the assessment by 'environmental impact statement', the relevant sections are ss 104 and 105, the should be read together with s 136(1)(b). For completeness, section 136(4) also directs the minister to have regard to the environmental history of the proponent, while ss 131 and 131AA require the minister to consider, respectively, comments from other ministers with relevant responsibilities and from the proponent.



the principles of ESD and not to act inconsistently with relevant international obligations or statutory management principles.<sup>1244</sup> As a process requirement this obviously does not necessarily ensure that the outcome will promote ESD. However, even assuming a decision-maker is disposed to promoting ESD actively, more significant difficulties arise when the decision-maker seeks to apply the principles of ESD to the facts and circumstances of a proposed development. The general problem is that the principles of ESD were designed to serve as foundations for the more detailed elaboration of policy (which might then be legislated), not to be inserted directly into legislation themselves. This can be seen from the following analysis of the ESD principles, first individually and then considered together.

Note that this analysis must be on the basis that the meaning and effect of the (statutory) ESD principles must be determined by legal interpretation, not by reference to their *policy* intent, as in chapter three. This is consistent with the approach of the courts, which is that even where a term may have an independent meaning beyond the law, its meaning in a statutory context is a matter of construction.<sup>1245</sup> This principle must apply even more strongly where, as here, ESD does not have a single independent meaning, but is the creature of various policy documents and varies between them.

*Statutory Meaning of the Integration Principle:*

‘Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations’

**Box 7.6 Integration Principle<sup>1246</sup>**

In policy terms, the integration principle is consistent with both Policy Tiers Two (weak integration) and Three (strong integration). In this statutory context however, the *EPBC Act* operates to prevent either of these models from applying according to its policy logic. First, as Macintosh points out, s 136(1) operates to *skew* the scope of the principle against the environment, because it requires that all economic and social matters be considered but restricts consideration of environmental matters to matters relevant to the MNES that are

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<sup>1244</sup> While there are other decision rules, they do not directly relate to the biophysical environment: the minister must have regard to the proponent’s environmental record (s 136(4)) and, if the development project is a coal seam gas or large coal mining development, to obtain the advice of the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development: (ss 24D, 131AB, 505D).

<sup>1245</sup> *Bannister Quest v Australian Fisheries Management Authority* (1997) FCR 503, following Sackville J (at first instance) in *P W Adams Pty Ltd v Australian Fisheries Management Authority* (1995) 60 FCR 387 at 400, 514.

<sup>1246</sup> *EPBC Act*, s 3A(a).

under assessment (ie to the aspects of the environment that are impacted by the proposed action *and* are protected by the Act).<sup>1247</sup> Further, the 'decision code' effect of s 136(5) effectively removes any scope to overcome this skewing by interpretation. For example, any argument that a purposive interpretation of the statutory object in s 3 to promote biodiversity conservation thereby militates in favour of that object being taken into account as another factor could not stand against the express words of s 136(5). If these arguments are correct, there is little scope for a decision-maker to address this consideration in any useful way and decision-makers will have little option other than to treat it as a 'box to be ticked' rather than as a substantive matter with the potential to affect outcomes.

*Precautionary Principle:*

'If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.'

**Box 7.7 Precautionary Principle<sup>1248</sup>**

The policy intent of the precautionary principle was argued in chapter three to be to authorise anticipatory action. This means acting to prevent serious or irreversible environmental harm, purely on the basis that society wishes to avoid the *possibility* of such outcomes, even though the likelihood and thus the *risk* of those outcomes occurring is unknown. Although the precautionary principle has acquired overtones of environmentalism in environmental discourse, it is a rational response to uncertainty and fully consistent with mainstream economics, as a decision-maker undertaking CBA will need to adopt a decision-rule about uncertainty when calculating costs.<sup>1249</sup>

This approach aligns with judicial interpretation. As Preston CJ of the NSW Land and Environment Court put it in *Telstra Corporation Ltd v Hornsby Shire Council* ('*Telstra Case*'), the leading Australian case on precautionary principle, the principle 'permits the taking of preventative measures without having to wait until the reality and seriousness of the threats

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<sup>1247</sup> Macintosh, 'The impact of ESD on Australia's environmental institutions', above n 83, 42.

<sup>1248</sup> *EPBC Act*, s 3A(b).

<sup>1249</sup> Macintosh, 'The impact of ESD on Australia's environmental institutions', above n 83, 42. See also the discussion in David Pearce, 'The Precautionary Principle and Economic Analysis' in *Interpreting the Precautionary Principle* (Cameron May, 1994) 132. See also the *OECD Declaration on Anticipatory Environmental Policies*, above n 396.

becomes fully known'.<sup>1250</sup> The *Telstra Case* has been cited with approval in Federal Court cases concerning the *EPBC Act*.<sup>1251</sup> His Honour's extensive analysis of the literature and case law in *Telstra* suggests that, in the context of discretionary decision-making, the heart of the principle is to err in favour of protecting the environment at all stages: once the threat of serious or irreversible environmental damage in circumstances of uncertainty is identified, a decision-maker, directed by the principle to regard the possibility such damage as unacceptable, must assume that the threat of such damage is real. This then shifts the burden of proof to the proponent to establish that the threat is either not real or is negligible; in considering evidence and arguments brought forward by the proponent to discharge that burden, prudence warrants decision-maker in retaining 'some margin for error', to provide 'ecological space or environmental room for manoeuvre'.<sup>1252</sup> This could be done by implementing a stepwise or adaptive-management approach, provided in any event that the measures adopted are proportionate and thus not unduly costly.<sup>1253</sup>

As a decision-rule, the precautionary principle partially offsets the lack of contextual information discussed above, as it is a principle for acting in the absence of information. Further, unlike the other principles of ESD, there is no problem per se in applying the precautionary principle to individual decisions under an EIA scheme; in Fowler's terms it is capable of operating as a 'directing principle' at this level.<sup>1254</sup> Precaution is broadly capable of application at any scale because the circumstance to which it responds, uncertainty, can

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<sup>1250</sup> (2007) 67 NSWLR 256, 44, [156].

<sup>1251</sup> *Australian Conservation Foundation Incorporated v Minister for the Environment* [2016] FCA 1042; *Lawyers for Forests Inc v Minister for the Environment Heritage and the Arts* (2009) 165 LGERA 203; note that this decision was affirmed on appeal and that arguments concerning the precautionary principle were not pressed: see (2009) 168 LGERA 220, 235.

<sup>1252</sup> See generally 67 NSWLR 256 273–280; see also 67 NSWLR 276, citing T O'Riordan and J Cameron, 'The History and Contemporary Significance of the Precautionary Principle' in T O'Riordan and J Cameron (eds) *Interpreting the Precautionary Principle* (Earthscan Publications 1994) 17; and C Barton, 'The status of the precautionary principle in Australia: its emergence in legislation and is a common law doctrine' (1998) 22 *Harvard Environmental Law Review* 509, 520. See also Preston, Justice Brian J, 'The Judicial Development of the Precautionary Principle' 35(2) *Environment and Planning Law Journal* 123.

<sup>1253</sup> *Ibid* 276–277.

<sup>1254</sup> Fowler 'Australian Environmental Law — its historical and current political context', above n 1144, 3. While the precautionary principle is clearly capable of application at the level of individual project approvals this does not mean that it is ideally applied at this level. For example, under the spatial planning model, if the principle were applied to identify high environmental values in environmental plans on a precautionary basis, further application of the principle at project-decision level may not be required.

arise at any scale,<sup>1255</sup> even though the nature of the uncertainty will change with scale and be much greater at greater scales.<sup>1256</sup>

*Ecological Principle:*

'The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.'

**Box 7.8 Ecological Principle<sup>1257</sup>**

Chapter three argued that this principle sat at the core of strong sustainability; that conservation of biodiversity and ecological integrity was fundamental to maintaining the assets that will generate the flow of ecosystem services to future generations, thereby providing intergenerational equity. As a result, at a policy level, this 'fundamental consideration' would be outweighed only by the most exceptional circumstances, such as a national security crisis, and even then, with the intention that the resulting draw-down of natural capital would be 'repaid'. However, in the context of s 136 of the EPBC Act, the 'fundamental consideration' of biodiversity is but one of several matters to be taken into account. Bates has pointed out the contradiction involved in this:

In the context of any particular decision, therefore, if protection of biodiversity is, at the most, accorded a weighting by the legislation only equal to other factors ... then the due weight to be accorded to biodiversity protection, after proper consideration by the decision-maker on the evidence, may legitimately be determined to be nil. Only if this weighting of relevant factors was not reasonably open to a decision-maker on the evidence, would the courts regards such a decision as possibly unlawful.<sup>1258</sup>

This aside, if a decision-maker assessing a development with a biodiversity impact were disposed to respond to the exhortation to treat biodiversity conservation as a fundamental

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<sup>1255</sup> Gullett, 'Environmental Protection and the "Precautionary Principle": A Response to Scientific Uncertainty in Environmental Management', above n 402, 65. Gullett has also argued that the incorporation of the principle into EIA schemes is a 'key way to effect the principle' (Warwick Gullett, 'Environmental Impact Assessment and the Precautionary Principle: Legislating Caution in Environmental Protection' (1998) 5 *Australian Journal of Environmental Management* 146, 147–148.

<sup>1256</sup> See Stephen R Dovers and John W Handmer, 'Ignorance, the Precautionary Principle, and Sustainability', (1995) 24(2) *Ambio* 92, 92.

<sup>1257</sup> *EPBC Act*, s 3A(c).

<sup>1258</sup> Bates, *Environmental Law*, n 1193 above, 320.

consideration, what does it imply? If biodiversity and ecological integrity are fundamental under SS, it implies refusing consent to any development involving the degradation or loss of assets essential to maintaining biodiversity or ecological integrity.<sup>1259</sup> This is consistent with the approaches of both Gibson et al and George, discussed in 7.2, and means that the principle is capable of application as a decision-rule at project-approval level, *provided* there is sufficient environmental information available to identify the relevant environmental attributes with little or no further enquiry. As chapter four demonstrates, this is unlikely to be the case in Australia.

*Principle of Intergenerational Equity (IGE):*

‘That the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.’

**Box 7.9 Principle of Intergenerational Equity<sup>1260</sup>**

Chapter three concluded that intergenerational equity was the normative principle behind the goal of ESD, but as rendered here it conflates the normative with the objective which it implies, taking the form ‘maintain the environment as a functioning system so as to treat future generations equitably’. In other words, this principle conflates ends, not with means, but with purpose.<sup>1261</sup> Several difficulties arise from this. First, in this form the principle gives rise to a similar contradiction to that arising from the casting of the biodiversity principle as a ‘fundamental consideration’: that one need only ‘have regard to’ what are, in essence, absolutes, namely the agreed end and the reason for agreeing to it. Society has either decided that it owes an obligation to future generations to pass on the means of meeting their needs, or it has not. Second, if the principles of ESD are properly formulated and institutionalised, they will provide the *means* of ensuring that individual decisions are consistent with the agreed end. Having regard to the agreed end (maintaining environmental productivity) and to the reason it was agreed (equity) may remind a

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<sup>1259</sup> This is always subject to the availability of full environmental offsets, but it is almost axiomatic that the availability of full offsets declines as environmental values increase, because rarity or uniqueness are often part of what makes environmental values high in the first place.

<sup>1260</sup> *EPBC Act*, s 3A(d).

<sup>1261</sup> This problem did not exist in the definition of the principles of ESD in the original EPBC Bill, as the definition was based on the NSESD, which made IGE an objective.

decision-maker of the policy context but does not actually steer the decision towards the social goal. In other words, this principle is redundant in this context.<sup>1262</sup>

This point is illustrated by the only Australian case to consider the substance of IGE,<sup>1263</sup> *Anderson and Another v Director General, Department of Environmental and Climate Change and Another*, a case concerning a statutory decision to authorise the destruction of Aboriginal objects.<sup>1264</sup> The NSW Court of Appeal reasoned that what is equitable can only be ascertained with an understanding of the relative importance of the assets:

It is difficult to see how intergenerational equity, being the obligation of the present generation to ensure that the relevant environment is maintained or enhanced for the benefit of future generations (in this case, of future generations of the local Aboriginal community), can be properly considered without the assessment of the archaeological and cultural significance of the Aboriginal objects on the one hand and the cumulative effect or impact which their destruction may have on the other. Intergenerational equity requires an evaluative judgment as to these matters for otherwise, as the appellants appear to submit, all Aboriginal objects found on land must be conserved for the benefit of future generations of the traditional custodians of that land. That cannot be so.<sup>1265</sup>

In effect, the principle of IGE pointed to the need to maintain a class of the physical 'capital' on which Aboriginal culture depended, but alone could not point to *which* assets in the class should be conserved, beyond the obvious conclusion that not everything could be conserved. Essentially, the court's reasoning is a rejection of 'absurdly strong sustainability', the idea that SD might require that all capital be conserved.<sup>1266</sup> However, as that concept was developed only to serve as a 'straw man' for the purposes of academic argument, the decision does not advance the present issue.<sup>1267</sup>

#### *Valuation Principle:*

<sup>1262</sup> Macintosh reaches the same conclusion based on an economic argument — see Andrew Macintosh, 'The impact of ESD on Australia's environmental institutions', above n 83, 42–43, discussed at 3.3.4.

<sup>1263</sup> Of the limited number of Australian cases dealing with intergenerational equity, most with the application of the principle rather than its actual meaning. See for example *F&D Bonaccorso Pty Ltd v City of Canada Bay Council [No 2]* (2007) 158 LGERA 250, 272, where the court considered the necessary content of a heritage impact statement on the basis that such statements 'served the principle of [IGE]'.<sup>1264</sup> (2008) 163 LGERA 400.

<sup>1265</sup> *Anderson and Another v Director General, Department of Environmental and Climate Change and Another* (2008) 163 LGERA 400, 426 (Tobias JA, with whom Spigelman CJ and Macfarlan JA agreed.)

<sup>1266</sup> See Herman Daly, 'On Wilfred Beckerman's Critique of Sustainable Development', (1995) 4 *Environmental Values* 49.

<sup>1267</sup> *Ibid* 49.

‘Improved valuation, pricing and incentive mechanisms should be promoted’

**Box 7.10 Valuation Principle<sup>1268</sup>**

As discussed in chapter three, the policy intent of the valuation principle is hard to divine from the reduced form it takes in the *EPBC Act*, compared to the IGAE from which it is taken, although clearly it is referring to policy approaches rooted in economics. Given the obscurity of this formulation, and thus referring to the IGAE as extrinsic material as an aid to interpretation,<sup>1269</sup> the policy conclusion from section 3.4.2 may also apply as a matter of legal interpretation. The thrust of that policy conclusion was that environmental problems can be addressed cost-effectively through the application of economic principles with a view to achieving economically efficient outcomes (Policy Tier 3), economic analysis (eg CBA) that would support such outcomes, and the use of market-based policy-implementation tools, for efficiency.

The problem for a decision-maker attempting to apply this approach in the context of considering the approval of a development project assessed under the EIA scheme here is that its application is confined, if not confounded, by the comprehensive nature of the scheme and the decision-making code in Part 9 Division 1. Consideration of economically efficient outcomes is excluded by the implicit requirement to consider the project as proposed and to ignore environmental impacts beyond impacts on MNES that were included in the assessment. The exclusion of CBA (in practice) has been discussed above; as valuation is undertaken to inform CBA, the same result arises. This is not to say that the principle is not capable of any application in that context. For example, the Act provides a means of internalising environmental externalities through the imposition of a financial contribution to repair or mitigate environmental damage (ie setting a ‘shadow price’ for pollution arising from the development) as a condition of approval, although this requires the proponent’s consent.<sup>1270</sup> The principle could nevertheless be read as an exhortation to use this mechanism where possible. Further, a decision-maker could encourage market-based implementation mechanisms through condition-setting, for example by adopting a policy of accepting appropriate biodiversity offsets obtained through a market in offsets, should a market exist. However, the application of the principle as a decision-rule will be

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<sup>1268</sup> *EPBC Act*, s 3A(e).

<sup>1269</sup> Section 15AB of the *Acts Interpretation Act 1901* (Cth) authorises the use of extrinsic material to determine the meaning of a provision that is ambiguous or obscure. See Box 3.8 for the relevant text from the IGAE.

<sup>1270</sup> See ss 134(3)(ab), 134(3A).

narrow, and of course, mandatory only to the point of requiring the decision-maker to consider the principle.

### *Considering ESD Globally*

One final matter in considering the EPBC Act as a vehicle for implementing ESD through decision rules is the mutual interaction of the principles of ESD. Although the statement of ESD principles in s 3A is not linked directly to a statement of the goal and core objectives of ESD, as the principles were in the EPBC Bill as presented, one might still readily infer, by reading the statutory object of 'promoting' ESD, together with the direction in s 136 to take the principles of ESD into account, a general intention that decisions should promote ESD by applying the principles, together, in decision-making. This reading is consistent with Gibson's argument that sustainability criteria need to be applied as a 'full set', and with Preston CJ's dictum in *Telstra*, that the precautionary principle should not be viewed in isolation but in the context of the other principles of ESD.<sup>1271</sup>

As a matter of policy logic, it does not follow from considering ESD principles as a full set that they can be applied *globally*, as a single integrated consideration. Notwithstanding this, in *Blue Wedges Inc v Minister for the Environment*,<sup>1272</sup> the Federal Court endorsed just that proposition, holding that, on the correct legal interpretation of s 136, the Minister was not required to consider each of the principles of ESD together:

[T]he Minister was not obliged by s 136(1) and (2)(a) to take into account each of the principles of ecologically sustainable development when considering each of the protected, economic or social matters. He was entitled to consider the matters together and to take the principles of ecologically sustainable development globally.<sup>1273</sup>

With respect, this cannot be correct.<sup>1274</sup> The principles of ESD, while derived from a single homogeneous social goal, are a heterogeneous compilation. Subject to one unlikely

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<sup>1271</sup> Gibson, above n 1130, 75. The fact that the criteria Gibson is discussing are not identical to the Principles of ESD does not alter the force of the argument.

<sup>1272</sup> (2008) 157 LGERA 428.

<sup>1273</sup> 167 LGERA 428, 448.

<sup>1274</sup> The writer does not query the Court's finding that the Minister was not required to consider the principles of ESD separately in relation to each of the three matters referred to in s 136 — ie to consider a principle such as the precautionary principle first in relation to environmental matters, then economic, then social matters. on this point. This is because ESD, by its nature, involves considering environmental, economic and social matters together, in order to reach an accommodation between them.



argument below, the principles do not represent a single cohesive or integrated whole but a list of factors covering a number of policy considerations, some of process and others of substance. To say that a decision-maker could have regard to the entire diversity of matters encompassed by the principles globally, does not make sense. For example, the lack of information that might prompt application of the precautionary principle will always sit in contradistinction to the considerations of cost-effectiveness relevant to the application of economic instruments, while if the matters at hand relate to biodiversity and ecological integrity, and so should be a 'fundamental consideration' under the biodiversity principle, the decision-maker will need to consider whether they are deserving of greater weight than might otherwise be given, something that cannot be done in the same single act of adverting that considers the effective integration of economic and social considerations.

The unlikely argument in favour of logic allowing a consideration of the five principles of ESD globally is that, on its proper construction, s 3A of the EPBC Act amounts to a definition of ESD itself, which might then be conceptualised, as in this thesis, as a goal of maximising economic welfare within ecological constraints, and possibly spawning the single question: does this proposed development conform to the ecological constraints identified under the Act? There are two significant reasons why such an argument is unlikely to succeed as a legal argument concerning the interpretation of s 3A. First, s 3A is not a definition of ESD; rather it is worded as introducing a class of items: '[t]he following principles are principles of [ESD]'. Secondly, as can be seen from Macintosh's exploration of the cost-effective policy principle, the chain of argument from the wording of the principles of ESD to a conclusion that, together, they mean SS, is both long and contestable, far too tenuous for a legal argument concerning statutory interpretation, despite both the appealing nature of the conclusion and the undesirable alternative conclusion, which is that several of the principles are almost certainly incapable of operational effect.<sup>1275</sup>

## 7.5 Conclusions on *EPBC Act* and ESD

Two viable models emerge from the literature for giving effect to sustainability objectives through an EIA scheme, the spatial planning model and the decision-rule model. The

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<sup>1275</sup> Andrew McIntosh, 'Ecologically Sustainable Development (ESD) and the cost effectiveness principle' (April 2016) *Australian Environment Review* 243.

spatial planning model emerged in the 1980s while the decision-rule model emerged a decade later. Superficially different, these two models tend to converge when implementing ESD, under which maintaining biodiversity and ecological function is a central objective. If this objective is to be translated into specific on-ground outcomes under an EIA scheme, it is axiomatic that environmental values essential to this objective and affected by an individual development be identified physically at some point in the decision-making process. Because this is only possible with comprehensive information and a clear understanding of the relevant ecology, it will generally not be practical for the proponent of an individual development project to obtain that information and understanding on a reactive basis in the course of environmental assessment. The requisite information and understanding must be available before that assessment occurs, from either environmental plans or a comprehensive environmental information system.

Australian governments had agreed in principle to the spatial planning model for EIA in the early 1990s, but when the Commonwealth government began to develop its reform model to implement ESD through EIA, an inchoate version of the decision-rules approach also emerged, under the rubric that the objective of EIA was to protect the environment by supporting the application of the principles of ESD. The approach was inchoate because the principles lacked coherence and clarity as a set of 'rules', and also because the 'rules' were in fact only mandatory considerations: an outcome consistent with policy goals was not guaranteed.

When it came to draft a bill, the Government adopted both models, but in weak form. The Bill provided for several forms of environmental planning, but mostly on a non-mandatory basis. Then, where these plans did exist, it then either excluded them from decision-making, or applied them on the narrow basis of requiring only that the decision-maker avoid direct inconsistency between plans and approvals. In the partial or complete absence of plans, the inchoate decision-rule model was applied by default. While the Act contained some specific decision rules beyond the ESD principles, the courts have given these a very narrow scope by applying an inconsistency test that only requires decision-makers to avoid approving an action that is 'manifestly contrary' to certain international obligations or statutory principles that are typically worded in broad terms.

At the end of the day, the theory suggests that the EIA scheme cannot work, because it does not implement either viable decisional model in full. At most, the Act might be

capable of delivering ESD-compatible outcomes in some cases, where a decision-maker is able to identify environmental features essential to ecological function because the relevant information happens to be available, or because the essentiality of affected environmental assets to ecological function is obvious, and then chooses to exercise statutory discretion so as to protect those assets.

### *Reasons for Policy Failure*

Why did government take the approach of adopting two models, neither in its complete form? Was this the result of operational factors, such as an inability to secure sufficient State cooperation under Australia's federal arrangements, or was government seeking to ensure only that ESD was taken into account through the EIA scheme? The documentary evidence supplies only a partial answer to these questions, although some conclusions can be drawn to support the view that both these factors were in operation to some degree.

As to operational factors, the spatial planning model was endorsed by governments in 1992, but the articulated lesson that EIA is not a substitute for planning did not take full root and was ignored or partly forgotten by the Commonwealth. Perhaps the potential political and budgetary costs of the spatial planning model became more apparent. In any event, instead of progressing EIA reform comprehensively as agreed in the NSESD, including developing the information base, the Commonwealth focused on reviewing its own EIA process, emphasising the technical process rather than policy context. However consciously this may have been done, the result was to traverse territory that was more familiar territory than policy context and which involved fewer political risks and administrative challenges.

One outcome of this process was the introduction through the *Main Discussion Paper* of 1994 of the weak decision-rules model, on the unsatisfying explanation that this model was a response to public submissions. Although the EIA review process ceased formally with the change of government in 1996, it would not be surprising if officials continued to draw on work done under that process. This may be the source of the assertion in later public documentation related to the EPBC Bill that the principles of ESD were 'now universally accepted' as the basis for policy integration in the development process. Neither internal nor public documents reveal the reason for the initial decision to enumerate the principles of ESD by reference to the NSESD and to cast them as no more than matters to be taken into account. Perhaps officials or the Environment Minister genuinely thought this was a

viable model: certainly the departmental briefing to the Minister was consistent with this naive view. Perhaps the Environment Minister believed this was all that was feasible given limited resources: that the Government had directed its new environmental funding to investment and had not allocated additional funding to the expanded regulatory role that accompanied the *EPBC Act*.

The reasons behind the negotiated amendment of the EPBC Bill to replace the more comprehensive NSESD definition of ESD with s 3A of the Act, reflecting the principles of environmental policy from the IGAE, are not clear beyond the influence of the NSW legislative precedent, but given the specificity of the decision framework in Part 9 Division 1 this change in isolation may not have been significant for the EIA scheme. With the decision rules approach available as the default approach, the legal primacy and practical dominance of the states in planning and land management might explain why plans of various kinds were not pursued. Less understandable is the narrow role ascribed to plans (and thus to conservation) under the EIA scheme. An approach that confines itself to the assessment of project impacts and avoiding inconsistency with plans, in preference to requiring conformity with conservation plans, suggests a desire to maximise ministerial discretion to approve development in preference to giving effect to statutory objects of promoting ESD and conservation.

Other benign explanations are possible for what must be regarded as examples of Dovers' 'policy ad hocery and amnesia'. The inconsistencies and redundancies in the formulations of ESD principles suggest that officials may not have fully understood the operational implications of the principles. And in formulating decision rules, officials may have applied a natural caution about moving too far from the well-trodden path of the standard model of EIA and the 'information processing' model on which it was built. Stakeholder views may have reinforced such caution.

A more politically oriented explanation would, as argued in relation to the Biodiversity Strategy in Chapter Six, exemplify Downs' issue-attention cycle.<sup>1276</sup> It may be that government took the politically easy first steps of endorsing ESD policies and the planning model, at a time of high support for environmental reforms. As it began to explore the implementation of these commitments, the serious political and practical difficulties involved in giving effect to these policies may have been sheeted home at a time when

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<sup>1276</sup> Downs, 'Up and down with Ecology — the "Issue-Attention Cycle"', above n 1094.

political enthusiasm for environmental policy was, post-Rio and post-Prime Minister Hawke's commitment to environmental issues, waning. The cost and complexity of developing and maintaining a full environmental planning model, not just in the face of state power and interests, but in the face of competing stakeholder interests associated with numerous environmental assets, would have acted as powerful disincentives to full implementation of the planning approach. The public submissions made in response to the government's initial discussion paper may have provided an opportunity for a relatively subtle shift to the apparently simpler and cheaper (and thus more 'realistic') decision-rules approach. Of course, fully developed, this approach too would also confront government with unpalatable decisions to protect ecological function in the face of powerful interests. But this was less obvious at the concept stage.

In the short term, unpalatable decisions could be avoided by focusing, as the Keating Government did, on incremental improvements to traditional EIA, while deferring the development of more specific policy objectives that would point to specific ecological constraints. It could also be avoided by emphasising, as the Howard Government did, major government investment in environmental recovery, while under-investing in implementation of the legislative vehicle that would give effect to sustainability constraints.<sup>1277</sup> While the limited available evidence provides only fragmentary direct support for this hypothesis, the path that governments took in developing the EPBC Act EIA scheme avoided some significant short-term political risks and obstacles, but left the problem of GEDD largely unaddressed by EIA. Against a social goal of ESD and a policy objective of maintaining ecological function, the scheme must be regarded as a policy failure.

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<sup>1277</sup> See Kate Crowley, 'Effective Environmental Federalism? Australia's Natural Heritage Trust' (2001) 3(4) *Journal of Environmental Policy and Planning* 255, for a discussion of the success of the Howard Government's Natural Heritage Trust in burnishing its environmental credentials.

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## CHAPTER EIGHT

### SUCCESSSES, FAILURES, PROSPECTS

*The vanity and presumption of governing beyond the grave is the most ridiculous and insolent of all tyrannies.*

Thomas Paine (1737–1809)<sup>1278</sup>

#### 8.1 Recapping the Thesis

The question addressed in this thesis is: to what extent was the failure of Australia's ESD policies due to policy rather than political factors? The thesis has sought to answer this question in two parts. By reference to an analysis of sustainability concepts and especially to the development of the ESD concept itself, the first part of the thesis concluded that as a social goal, ESD was a success in principle. It encapsulated the aspiration of society to respond to the problem of GEDD by defining a state, ecological sustainability, in which quality of life would be maximised, within the ecological constraints necessary to ensure that future generations would have an opportunity, equivalent to that held by the present generation, to maximise their own quality of life. It did this by building on the dominant social paradigm, requiring a significant constraint certainly, but otherwise maintaining existing aspirations and approaches. By reference to four case studies of policies intended to advance the goal of ESD, the second part of the thesis concluded that as a pathway to a state of ecological sustainability, ESD was a failure in policy. The four policies examined in this thesis did not achieve their stated objectives due to fundamental flaws in their design and execution; they were policy failures.

This section recaps the argument of the thesis by chapter. Subsequent sections identify the contribution of the thesis in shedding light on the reasons for those failures and the steps that might be taken to remedy those failures. These remedies are relevant to contemporary

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<sup>1278</sup> Thomas Paine, *Rights of Man: Being an Answer to Mr. Burke's Attack on the French Revolution* (J S Jordan, 2<sup>nd</sup> ed, 1791) 9.

policy, even though Australian governments have moved away from ESD over time, because the problem of GEDD has only worsened in the near-thirty years since ESD was first adopted, and no viable alternative social goals have emerged. As Graham Richardson put it when looking back over his time as Environment Minister: 'in the next few decades the environment will return as an issue, because it has to'.<sup>1279</sup>

### *Chapter Summaries*

Chapter one provided a brief historical context for the research question and explained the research method as historical documentary analysis of official records, against a backdrop of various government ESD commitments and policies. The chapter proposed and described a taxonomy of environmental policy, providing a heuristic reference for policies real and possible. It identified a gap in the literature concerning both the meaning of ESD and the comprehensive evaluation of its policy success.

Chapter two considered whether a concept such as ESD was needed: could existing mainstream approaches solve the problem? As GEDD can be seen as an economic problem, might approaches based on complete, competitive and fully informed markets be sufficient, provided any market failures were corrected by government intervention? The chapter found that an efficient market economy would indeed make significant inroads into GEDD through the more efficient allocation of environmental resources. There were, however, several limits to economic efficiency as a path to ecological sustainability. There were a range of practical difficulties involved in bringing all environmental goods and services into the markets, ranging from the problems of assigning property rights to assets such as fisheries that cross jurisdictional boundaries to the impossibility of assigning rights in individual ecosystems that provide life-support services. Even where environmental goods could otherwise be marketed, the uncertainty created by ecological attributes of non-linearity and discontinuous dynamics near thresholds would make markets in many goods and services unworkable by invalidating the price signals that coordinate transactions in a market. Finally, the long-term impacts of GEDD would create major difficulties for governments attempting to align private and social costs, primarily because there is no way of knowing the preferences of future generations and because CBA discounts future costs and benefits on the basis of current preferences. In the final analysis, the chapter

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<sup>1279</sup> Richardson, above n 295, 257



concluded that the ‘selfish altruism’ of efficient markets was not sufficient to halt GEDD. A normative principle of ‘disinterested fairness’ is required.<sup>1280</sup>

Chapter three addressed the research sub-question of the meaning and viability of ESD as a policy goal. The chapter traced the history of sustainability concepts and explained how ESD, although having its own history and attributes, was rooted in and derived much of its moral authority from SD. Conceptually, it sat adjacent to and was a close analogue of SS in Policy Tier 5, because both concepts are based on maximising economic welfare within ecological constraints. The analysis showed that ESD is a feasible social goal, well-adapted to responding to GEDD because maintenance of biodiversity and ecological integrity is a sufficient condition for halting GEDD. In practice, ESD was defined inconsistently and in some versions, by reference to its parts rather than its whole, creating uncertainty.

Chapters four to seven presented four case studies of policies designed to promote ESD. Chapter four considered policy concerning environmental information and was chosen on the basis that good information is foundational to environmental policy and that policy on informing systems in support of ESD should have been relatively straightforward to formulate as both associated costs and political sensitivities should be relatively low. The chapter found that governments were early to recognise the importance of environmental information, and that Australian governments were active in developing information frameworks including the PSR model and environmental accounting. Despite this, the history of national approaches to informing systems revealed a litany of policy failure, characterised by failures to: formulate and adhere to clear information policy goals; feed environmental information back into policy-making; and coordinate and integrate information, both horizontally within the Commonwealth and vertically with the States. The consequences ranged from gaps and orphan measures on the one hand to duplication on the other. The underlying reasons for this include first, the perverse incentives that apply in Australia’s federal system, under which the Commonwealth is responsible for national and international commitments yet has limited on-ground responsibilities; and second, that because governments adopted ESD-related measures with limited content, the lack of environmental information was of limited consequence.

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<sup>1280</sup> This is Page’s counterpart term to ‘selfish altruism’: see Page, above n 121, 161. Macintosh uses the term ‘disinterested altruism’: See Macintosh *Ecologically Sustainable Development (ESD) and the Cost-Effectiveness Principle*, above n 83, 245.

Chapter five considered the flagship national program for implementing ESD, the NSESD. Earlier studies had found that this program was poorly implemented and under-supported; this thesis revealed significant new information, allowing a more detailed description of the significant flaws of process throughout the program's development. The chapter found that the Government acted hastily in establishing the ESD working groups, adopting as a result a 'bottom-up' process organised around established sectors and stakeholders. This created a strong natural bias to incrementalism when pursuit of ESD required major change driven by government to overcome the inertia of the status quo. Notwithstanding this limitation, the working groups delivered recommendations for significant incremental change and a refined set of foundational principles that governments might have used as a platform on which to build further policy effort towards ESD. Instead, government lost policy momentum through abrupt changes to the process and lowered its policy ambition significantly yet without disclosing this, to an incremental approach of giving an 'ESD perspective to current policy directions', an approach later described by the PC as a 'voluntary code'. In this light, it is hardly surprising that the NSESD was so lacking in institutionalisation and investment. Rather than indicating poor policy design, these attributes become evidence that the objective of governments was not to advance ESD, but to deal with an unwanted inheritance from a previous government without political embarrassment. The making of the 1993 Statement, which immediately followed but barely acknowledged the NSESD, and apparently aimed at mollifying environment groups, lends support to this conclusion.

Chapter six looked at the National Biodiversity Strategy. The main finding of the chapter was that, while the original intent of the Commonwealth was to conserve biodiversity, once it failed to secure either an international obligation to a biodiversity equivalent of the 'polluter-pays' principle, or international and domestic commitments to substantial policy integration, it lowered its policy ambition without public acknowledgement, as it had with the NSESD. As a result it adopted national strategies that retained a high stated policy ambition, but were not supported by the major institutionalisation or investment needed to effectuate its management actions. This was exacerbated by misaligned Commonwealth and State roles and responsibilities, which created perverse incentives for the Commonwealth to make expansive commitments that it could or would not implement, and for the States to join the strategy process but without real commitment.

All of these factors served to create a policy facade that was not only ineffective in conserving biodiversity, but unable to support monitoring or review. Governments thus tended to respond to generalised review findings of a lack of progress by ‘short-circuiting’ the policy process, on the one hand acknowledging a lack of progress, while on the other, commencing strategy-development afresh, as if the lack of progress were a problem newly identified. The case study also finds that, over time, the objective of government shifted from implementing the Biodiversity Convention to remaining in formal compliance with the convention. While the Biodiversity Strategy may have had some positive outcomes in aligning Commonwealth and State biodiversity policies and internationally in maintaining Australia as a party in compliance with the Biodiversity Convention, against a goal of reversing GEDD it was a failure, lacking measurable on-ground impact.

Chapter seven considered the extent to which the EIA scheme in the *EPBC Act* promotes ESD. The literature suggests that there are two viable means by which an EIA scheme can advance a goal such as ESD, the spatial planning model and the decision-rules model. An examination of the legislative history of the EPBC Act showed that Commonwealth and State governments had agreed in principle to the spatial planning model in the early 1990s, but that the Commonwealth then displayed a partial policy amnesia by focusing on EIA process reform. Later the Howard Government pursued the inclusion of a clear definition of ESD in the EPBC Bill, along with the partial institutionalisation of both the planning and decision-rule models. The definition of ESD was diluted through parliamentary negotiations to a set of principles, at the same time enacting both EIA scheme models, without fully institutionalising either. This was exacerbated subsequently by limited implementation. A theoretical analysis found nothing in the EIA scheme to support an argument that, properly made, approval decisions under the Act will achieve the object of the Act of promoting ESD. Rather, the analysis showed that the decisional requirements of the Act, under which decision-makers ‘have regard’, not to ESD but to the ‘principles of ESD’, while also ‘not acting inconsistently’ with various weakly institutionalised requirements, were not likely to have a discernible impact on outcomes. The principles of ESD were either too general to direct a result or inapplicable because they were principles of policy rather than decision-making, while plans that might have kept decisions within ecological constraints were either non-existent or cast in general terms. Other decision rules such as the World Heritage Management Principles were also too general. At most, decision rules might *support* an ESD-consistent decision by a decision-maker minded to make such a decision. As a result, the application of ESD under the EPBC Act is a process

that will rarely point strongly to, let alone constrain a decision-maker to, a particular outcome.

## 8.2 To What Extent Was the Failure of ESD Policies Due to Policy Failure?

Chapter one identified GEDD as having all the characteristics of a ‘wicked’ problem: difficult to define, lacking a clear solution, and requiring moral choices. Despite this, and for all the flaws of the policy process as it played out, ESD, properly interpreted, emerges from the evaluation of this thesis as a successful dual concept, first in framing a desire to halt and reverse GEDD as a social goal of ‘ecological sustainability’ and secondly in defining the path to ecological sustainability as ‘ecologically sustainable development’. Correctly interpreted, ESD successfully defines the goal as a state in which ecological function is maintained — in other words, as a state in which nature’s role and essential functions would be maintained, providing humanity with opportunities for quality of life in the same way as it has always done, without attempting unrealistically to prevent human modification or natural evolution. This is a coherent concept. Equally coherent is the related concept that ESD is the path to ecological sustainability: that ecological function can be maintained by consuming ecological goods and services at no greater rate than nature produces them. As scholars have pointed out, this is analogous to Hicksian income in economics: the highest consumption consistent with maintaining wealth.<sup>1281</sup>

If the concept of ESD was well-adapted to the problem at hand, and since basic failures of implementation such as under-investment or poor program administration are either beyond scope or already discussed in the literature, any policy failures of interest here will have occurred in the translation of the ESD concept into principles and the development of those principles into policy frameworks. The analysis that follows — of failure in that process of goal translation and policy development — is conducted against the backdrop of the general observation that in Dror’s terms ESD was ‘grand policy’, a critical choice of great significance such as dropping the first atomic bomb, or a long-term strategy such as building the European Union.<sup>1282</sup> Grand policies are value-based and goal-directed, seeking

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<sup>1281</sup> See for example David Pearce, ‘An Intellectual History of Environmental Economics’ (2002) 27 *Annual Review of Energy and Environment* 57, 62, 64.

<sup>1282</sup> Yehezkel Dror, ‘Training for Policy Makers’ above n 30, 80, 81.

to increase the probability of good futures.<sup>1283</sup> As Dror argues, the difficulty is that grand policies aim at long-term impacts,<sup>1284</sup> posing a serious dilemma that undermines the significance of long-term strategies, making them less attractive:

It is the contradictions between long-term values and long implementation cycles on one hand and unpredictability and short political and personal cycles on the other that constitute a main cause of the *fragility* of grand policies.<sup>1285</sup>

Possible reasons for the failure of governments to address this fragility are considered below, after first recalling the limitations of this thesis in undertaking that analysis.

### **8.2.1 Limitations of this Thesis in Identifying Reasons for Policy Failure**

The conclusions that follow are significant yet nevertheless limited by the scope and method of the thesis. Of the four case studies, one, on environmental information, was directed to representing an ‘easy case’, where government should have found it easiest to implement ESD. Two case studies, covering the NSESD and National Biodiversity Strategy, were directed respectively to the premier national ESD program, and to one of the most significant subject areas falling within the scope of ESD. The fourth, the implementation of ESD through the *EPBC Act*, was directed to examining the contribution of law, the most coercive of domestic policy tools, under the nation’s most significant environmental law. Despite the diversity of the case studies, their limited number exposes the conclusions drawn to the risk of contradiction by other cases. As to method, the writer selected historical documentary analysis on the basis that it was most likely to reveal first, the extent to which ministers and officials understood ESD, and secondly to identify as formally and certainly as possible, the objectives and rationale of ESD policies. Generally the official record appeared to be complete, although sometimes it was not possible to tell whether records were drafts or unsigned final documents and on other occasions the writer was unable to locate documents that might be expected to exist. Some policy documents failed to reveal policy thinking; in particular, the series of Cabinet memoranda in the development of the NSESD lacked policy substance because they tended to ask Cabinet to endorse an outcome agreed between officials without explaining the underlying policy logic. The major limitation of documentary analysis is that it is much less likely than

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<sup>1283</sup> Ibid 82, 84.

<sup>1284</sup> Ibid 85.

<sup>1285</sup> Ibid 86 [emphasis added].

interview to reveal the political factors behind various policy decisions. No doubt politicians have always been guarded about recording political discussions, for reasons exemplified by the political fate of Richard Nixon, but the incentive to confine political deliberation to conversations has been even higher since the *Freedom of Information Act 1982* (Cth). This is why the analysis here is confined to policy failings traceable to flawed concepts or processes.

### 8.2.2 Possible Underlying Reasons for Policy Failure

The immediate causes of policy failure here, particularly superficial institutionalisation, under-investment and lack of monitoring, are readily identifiable and have been discussed in earlier literature. The more interesting and less-traversed terrain concerns the ultimate reasons for the failure of ESD policies. Many of these reasons overlap.

*That Government Did Not Understand or Could Not Agree on the Meaning of ESD, Contributing to Uncertainty as to the Level of Policy Ambition*

The evidence is mixed as to whether governments fully understood the meaning of ESD, particularly in the lead-up to the major sustainability initiatives of 1992. The 1989 Statement defined ESD, briefly but accurately in the argument of this thesis, as economic growth that does not jeopardise the future productive base (Policy Tier Five). Cabinet agreed only months later to the ESD process, without mention of the 1989 definition and instead premised partly on the basis that ESD needed to be defined, rigorously so. The subsequent ESD Discussion Paper of 1990 defined ESD in terms consonant with, but without reference to, the 1989 definition and then embarked on a detailed discussion of an initial set of principles of ESD that at different points corresponds to policy integration (Policy Tier Two) and economic efficiency (Policy Tier Four). Section 3.3.3 concluded that it was not possible to tell from the record whether this ambivalence arose from uncertainty or from disagreement among officials, although there is evidence of both. Although the principle of biodiversity conservation and ecological integrity (variously described), was absent from the discussion paper, it was then included in both the IGAE and NSESD in 1992, suggesting a shift towards Policy Tier Five. However, the differences between these two instruments and their subsequent incorporation into several legislative forms left the policy lacking clear meaning and pointing either to Tier Two, or weakly to Tier Four. The reduction of ESD to 'principles' in the IGAE points to Tier Two.

Even when institutionalising ESD through the *EPBC Act* after a decade of commitment to ESD, one plausible explanation for the poor implementation of ESD under that Act is a lack of understanding of the concept. The approach first, of defining and applying the *principles* of ESD, rather than a wholistic conception of the concept such as welfare maximisation within ecological constraints, and secondly of applying ESD principles as considerations only, suggests complete misconception and certainly points strongly to ‘tick the box’ results rather than to the identification and enforcement of ecological constraints in the form of decision rules. Further, even were there a complete set of bioregional plans, the prohibition in the Act on having regard to them, or on a less-likely interpretation, the statutory direction that decision-makers not act inconsistently with the plans (as distinct from a stronger requirement to conform to them) suggests a lack of understanding. Alternatively, but less likely in the writer’s view given lack of evidence, is the possibility that the EIA scheme in the Act exemplifies a deliberate policy facadism (see below).

*That Government Underestimated the Scale of the Problem and the Implications of ESD and Too Readily Made a ‘Grand Policy’ Choice Without Undertaking a Corresponding ‘Grand Policy Process’*

A variant on the possibilities discussed above is that governments understood ESD in a technical sense but underestimated the problem of GEDD or the implications of adopting ESD as a social goal in response. This is most noticeable in the ESD Discussion Paper, which defines ESD at Policy Tier Five but then discusses the principles primarily on the basis of achieving ESD through economic efficiency, a Tier Three response. Even economic efficiency is an ambitious political goal, as it would involve, among other things, placing a price on environmental goods previously consumed at no cost. While the physical and financial impact of sustainability policies on stakeholders would depend on the degree to which the condition of the environment fell short of sustainability, the political impact of ESD as a goal-directed approach is dramatic, akin to turning the dominant neoliberal policy paradigm on its head, a problem encapsulated by Hamilton:

If taken seriously, ESD poses a fundamental challenge to the traditional approach of economics. The philosophy and practice of economic rationalism is that governments should focus on the means and not the ends of policy, so that if markets are functioning efficiently their outcomes will be socially optimal. ESD, on the other hand, inverts this process by setting policy targets that will

shift us towards ecological sustainability. Markets and government regulations are then constrained or organised to achieve the targets.<sup>1286</sup>

In fact, ESD represents a paradigm shift in the Kuhnian sense of change of world view, a revolution in which existing institutions are replaced due to a growing sense that they 'have ceased adequately to meet the problems posed by and environment that they have in part created'.<sup>1287</sup> Western societies have made paradigm shifts before. The welfare state began to replace laissez-faire social models in the late nineteenth century; Keynesianism and macroeconomic management more generally emerged in the 1930s and became dominant in the post-war era; while neoliberalism and monetarism reached dominance in the Reagan-Thatcher era of the early 1980s. In each case there were major social forces behind the shifts: growing affluence and the desire of government to undermine the rise of socialism, in the case of the welfare state; unprecedented macroeconomic management tasks arising from depression, war and reconstruction in the case of Keynesianism; and the oil price shocks and stagflation of the 1970s in the case of neoliberalism.

While the environmental concerns of the late twentieth century were strong, most prominently in the 1960s and early 1970s and again in the late 1980s and early 1990s, the social forces behind them did not produce a complete paradigm shift across the whole of society, in which case it would be the role of a government, convinced that GEDD must be dealt with, to secure such a shift by building on existing momentum. The task would not only be to make a grand policy choice, but to build the necessary social support for that choice through an appropriate grand policy process.

Grand policy choices that are not accompanied by a grand policy process risk being neither understood nor broadly supported by society. In the case of ESD, full social support was necessary to give government the mandate it needed to take the hard decisions required by a concept in which sustainability constraints are at least implicit. This is the fragility to which Dror refers. Without the necessary social support, the tensions between the demands of the long-term commitment to the interests of future generations and the short-term demands of present interests, including the present interests of politicians in short political cycles, would be too great. The policy would lack resilience and either collapse or, as here, fall victim to policy facadism.

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<sup>1286</sup> Clive Hamilton, 'Ecologically Sustainable Development: Implications for Governance in Australia', above n 433, 65.

<sup>1287</sup> Thomas Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press 1962) 91.



Although the ESD Process of the early 1990s was of unprecedented scale for environmental issues and was regarded by many as successful in various ways, it was not well-adapted to securing social support for ESD because it was undertaken in the absence of clarity from government about policy goals and, more significantly, because it was corporatist rather than community-based. Public engagement in the ESD Process was limited and for the most part the process was conducted behind closed doors, culminating in the negotiation of the NSESD between Commonwealth and State officials.

Predominantly, ESD was developed, translated into policy, implemented and reviewed by officials, often under significant time pressures and sometimes with Cabinet processes that were either absent, as with the 1989 Statement or the Biodiversity Strategy after 1993; or precipitate, as with the framing of the ESD Process. Overall, both ESD and its key components, including the Biodiversity Strategy and the *EPBC Act*, have been conceived, consulted on, promulgated and dispatched with limited public awareness, let alone engagement. While sustainability had a degree of prominence, this prominence had (and continues to be) much more in discourse than in policy. It is not surprising therefore that, other than in the period in which the initial commitments were made, ESD policies lacked a broad social constituency and that their hollowing-out or demise did not generate significant public debate.

Even had a grand policy process secured social support for ESD, the difficult choices required by sustainability constraints are ongoing. Resistance from affected interests will naturally increase as agreed ecological constraints 'bite', creating pressure to relax or reverse decisions already taken. Resilience features might include provision for ongoing social dialogue about the rationale for adopting ecological constraints and regular review (and adjustment) of the equity of burden-sharing. The implication is that a corresponding ongoing social dialogue is needed to give the policy resilience in the face of policy fragility. It is thus unfortunate that Australian policy experiments in maintaining ongoing social dialogue, the Commission for the Future (1985–1998) and particularly the environment-specific Climate Commission (2011–2014) have not survived the short-termist political culture.<sup>1288</sup>

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<sup>1288</sup> For a review of the work of the Commission for the Future (well before its abolition), see Richard A Slaughter, 'Australia's Commission for the Future: The First Six Years' (1992) 24(3) *Futures* 268. Although it existed for 13 years, the Commission's effectiveness was significantly undermined in its latter years by declining budgets. The Climate Commission was established as part of the 'Clean Energy Future' climate change response in 2011 and was abolished in 2014. Its role was to 'inform Australia's approach to addressing climate change and help build the consensus required to move to a competitive, low pollution Australian economy': see

*That the Commonwealth Ignored or Underestimated the Importance of the States*

The Commonwealth committed to ESD unilaterally and with little apparent thought about the role of the States. It did this twice in 1989, three times if the decision to develop a National Biodiversity Strategy, part of the 1989 Statement, is included. In each case it only later invited the States to join the initiative. Nominally States joined as full partners but for the NSESD at least Commonwealth officials saw them as engaging only to protect themselves from unilateral Commonwealth action. The focus of both the IGAE and the later COAG Agreement on Roles and Responsibilities for the Environment (1997) on allocating roles and responsibilities, and the general approach of both documents in identifying Commonwealth interests in environmental matters and specifying that all other matters fall to the States suggests that this remained the primary concern of the States in national environmental policy.<sup>1289</sup>

The price of the Commonwealth's treatment of the States and the perverse incentives that applied as a consequence was lack of commitment by the States, forcing the Commonwealth to pursue national strategies which relied on voluntary actions by States, which, unsurprisingly, they have often failed to take. Another consequence of this situation has been a failure by the Commonwealth to follow through. Bioregional planning was agreed in principle under the Biodiversity Strategy and provision made for it in the EPBC Act, but the absence of further action suggests that when faced with the need to secure State cooperation to proceed, in the face of likely defensiveness from States concerning their traditional land management role and likely resistance to contributing to the no-doubt significant costs, the Commonwealth took the easier course.

*Failure to Take a Sufficiently Wholistic Approach*

One possibility, raised by the failure of policy on environmental information to provide coherent support for ESD, is a failure to take a sufficiently wholistic approach to policy

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<<https://web.archive.org/web/20120325203148/http://climatecommission.gov.au/about/terms-of-reference/>>. The work of the commission was continued as a private initiative by the former commissioners as the Climate Council on the Climate Council: see <<https://www.climatecouncil.org.au>> (both viewed 23 May 2018).

<sup>1289</sup> See IGAE, above n 370, section 2 'Roles of the Parties — Responsibilities and Interests'; COAG, Heads of agreement on Commonwealth and State roles and responsibilities for the Environment (COAG 1997), available at <<http://www.environment.gov.au/resource/heads-agreement-commonwealth-and-state-roles-and-responsibilities-environment>>, Preamble, [3]–[5] (viewed 21 May 2018).

development. Although government did on occasion link environmental information policy to ESD, it has done so without a clear and enduring resolve to build information frameworks and associated institutions as a foundational support for ESD policy. Even when a clear statement of intent was made, such as to establish comprehensive national biodiversity monitoring, commitments were not fulfilled. Rather, the Commonwealth has, in Lindblom's famous terminology, 'muddled through',<sup>1290</sup> tending this 'branch' of the policy tree by accreting significant information and technical capacity over the years while either failing to develop, or, in the case of several policies including the National Plan for Environmental Information, failing to implement, a 'root and branch' approach to environmental information that was tightly integrated with the other ESD-relevant policies that it supported. The consequence of such failure appears to have been that environmental information policy was more vulnerable to technical and incremental approaches. Even the most recent environmental information initiative, a (further) commitment to environmental accounting, potentially a powerful instrument in service of sustainability goals, illustrates this point by being cast in technocratic terms as better-informing decision-makers.

*That Government Intended Only to Create the Appearance of Action*

A more cynical argument can also be made, that governments understood ESD well-enough but never intended to pursue it because it threatened the dominant growth paradigm. Instead, the argument would go, governments were driven purely by a political calculus that public support for sustainability concepts was too large to ignore but too small to support a paradigm shift, thus calling for a response that was significant enough to attract or retain political support but not sufficiently substantial to challenge either vested interests or the neoliberal paradigm. This would involve a conscious political facadism.

If a government were minded to pursue a policy out of cynical motives, the methodology of this thesis, based on examining official documents, is not well-adapted to reveal it, as base motives are unlikely to be committed to the public record. However, to the extent that the documents do convey motive, they do not support this argument, but suggest instead an explanation that aligns with the Downs issue-attention cycle — ie that the initial decisions to adopt an ESD goal reflected genuine, if under-considered, motives, but that government enthusiasm waned with public concern and as the implications of genuine

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<sup>1290</sup> Charles E Lindblom, "The Science of "Muddling Through"" (1959) 19(2) *Public Administration Review* 79.

pursuit of ESD became more apparent. The picture is however clouded by political factors. First, several authors argue that Prime Minister Keating's priorities lay outside the environment,<sup>1291</sup> leaving it somewhat unclear whether the decline in environmental priorities of the early 1990s was accelerated by his personal priorities and his desire to distance himself from the initiatives of his predecessor. On the other side of the coin, the relatively strong environmental policies of the early Howard years can be argued to have been driven, not by a resurgence of environmental concern but by a 'horse-trading' approach in which stronger environmental policies happened to be the *quid pro quo* for unrelated reforms, initially in the form of the Natural Heritage Trust program, which derived its funding from, and provided a justification for, the partial sale of the government telecommunications utility, thus advancing a major government priority of privatisation; and later for a second tranche of new environment funding that was secured in return for Democrat support for a Goods and Services Tax.<sup>1292</sup>

Despite these political factors, the explanation most consistent with the body of evidence is that governments were genuine at the outset but, because of poor policy processes and fading concerns, were left with difficult political choices, explored in the next section.

### **8.2.3 Consequences of Failing to Match the Grand Policy with a Grand Policy Process**

A government adopting or inheriting an ESD goal that had not secured broad public support would have had four choices, two pure and two pragmatic. The pure options were to abandon the goal or redouble effort with a view to securing a paradigm shift. Even where policies could be talked down as those of a previous government, it would be hard to abandon ESD in the face of significant public support for the environment and significant sustainability, not to mention international commitments, while maintaining credibility. Redoubled effort would involve advocacy of constraints, against the tenor of the dominant growth paradigm. The pragmatic options were to maintain ESD policies, either on a 'best-efforts' basis or as a facade, a form of political illusion. Given the

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<sup>1291</sup> See Nicholas Economou, 'Australian Environmental Policy Making in Transition: The Rise and Fall of the Resource Assessment Commission' (1996) 55(1) *Australian Journal of Public Administration* 12; Joan Staples, 'Environmental Policy, Environmental NGOs and the Keating Government' Paper Delivered at Australian Political Studies Conference, Hobart, Tasmania, 2012, <[https://www.auspsa.org.au/sites/default/files/environmental\\_policy\\_joan\\_staples.pdf](https://www.auspsa.org.au/sites/default/files/environmental_policy_joan_staples.pdf)> (viewed 22 May 2018).

<sup>1292</sup> John Howard (Prime Minister), 'Changes to the Goods and Services Tax (GST)', Media Release, 31 May 1999 (Prime Minister, 1999).

vicissitudes of politics and major institutional limitations such as short three-year parliamentary terms, it is not surprising that Australian governments appear to have adopted a blend of the pragmatic, advancing ESD where possible but without commitments that might incur significant political costs. This might be seen as a form of political path dependency, although that term is more commonly associated with the impact of institutions or policies rather than politics.<sup>1293</sup> The effect of a desire to avoid embarrassment would be to steer governments towards a path of least resistance, lowering political ambition where possible while otherwise adopting policy facadism.

The Biodiversity Strategy illustrates both these approaches. In terms of policy ambition, an initial commitment to biodiversity conservation as a major component of ESD was followed by a progressive lowering of policy ambition to a low *real politik* objective of maintaining Australia's status as a party to the Biodiversity Convention in good standing. In terms of facadism, governments went through the motions of developing strategies, undertaking limited implementation and then undertaking reviews, with successive policies and reviews being less substantial. Finding themselves unable to complete the standard policy cycle of 'review and update' for want of progress or even measurement of progress, governments resorted to 'short-circuiting' the policy cycle, jumping from the monitoring and review stages straight back to the strategy formulation stage. The Draft 2018 Strategy even abandons the pretence of governments adopting programmatic means in pursuit of policy ends.

#### *Outcomes: the Marginalisation of Environmental Policy?*

In the light of ESD policy outcomes, the argument can be made that the objective of much environmental policy is, or has become, not the advancement of ESD or substantive environmental goals, but the purchase of environmental credibility. In this regard, Macintosh has argued that Australian governments appear to pursue environmental goals only within defined boundaries:

[T]he three key rules of thumb [are] as follows.

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<sup>1293</sup> See for example Adrian Kay, 'A Critique of the Use of Path Dependency in Policy Studies' (2005) 83(3) *Public Administration* 553.

- Governments only intervene to mitigate pollution, address degradation of renewable resources and protect the natural environment where it improves economic outcomes or does not involve significant economic costs.
- The likelihood of Government intervention is primarily a function of the strength of public opinion, the opportunity costs of the proposed solutions and the power of any vested interests adversely affected by the reform.
- The sensitivity of Governments to vested interests means that distributional issues are central. Governments generally design and implement policy so as to minimise direct impacts on vested interests, provide generous compensation for any residual impacts on vested interests and, in order to avoid direct conflict with vested interests, often 'go around' them by subsidising more environmentally benign alternatives (eg renewable energy and energy efficiency).<sup>1294</sup>

Although there are no broad empirical studies to support the rules, they are certainly consistent with the policy approaches considered by this thesis, at least from 1992. The implication of these rules, which can be summarised as avoiding significant adverse economic, budgetary or distributional impacts, is that governments will not be likely to pursue ESD genuinely, short of overwhelming public support, because the necessary constraints will likely breach all of these rules, particularly the distributional rule because ESD is, fundamentally, a distributional goal.

### 8.3 Is ESD Politically Viable?

In crude terms, Australian governments appear to have backed away from ESD because the politics do not add up: the primary benefits fall to future generations, who do not vote, while the primary burdens fall on the present generation, who do vote but whose apparent desire for maintaining ecosystem function (including for the benefit of their future selves) has been variable but, overall, limited. In such circumstances, a lesser aspiration than solving GEDD might simply be abandoned as politically unviable. Unfortunately, the challenge posed by GEDD is, to borrow a term from the Global Financial Crisis, 'too big to fail': if unaddressed, it may lead to disaster, even on an existential scale. A paradigm

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<sup>1294</sup> Andrew Macintosh, 'The Impact of ESD on Australia's Environmental Institutions', above n 83, 33. 370

shift, a policy revolution, is needed and this analysis has shown that ESD is a well-adapted prescription for such a shift. Even at the height of public concern in the late 1980s, when the likely impacts of climate change entered general political debate and the Brundtland Report and the forthcoming Rio Conference raised awareness worldwide, ESD lacked the broad support necessary for real action to be politically viable. In a federal liberal democracy such as Australia, particularly given its short political cycles, would a genuine commitment to ESD ever be politically feasible?

In the absence of a major environmental crisis (by which time it may be too late to halt dangerous climate change in particular) building the necessary broad social support for ESD would certainly not be easy. Fundamentally, such an exercise would be flying in the face of contradictions between the long-term aspirations and short-term interests. Moreover, the option of early and thus easier action has passed. Government might still try to build the case, for example by instituting a truly comprehensive environmental information framework and program, using the resulting information to build a strong case, but the rationalism and gradualism of such an approach would probably assign it to the ranks of supporting approaches. An approach based on engaging with social values, such as aspirations for future generations, offers more prospect in the current circumstances, although the effort would need to be major and sustained, while the politics would remain fraught. (This is ironic given that ESD, while pointing to a significantly greater emphasis on environmental issues, often associated with the political Left, should in principle appeal to the political Right since it is philosophically close to classic liberalism of the Lockean standard of ‘enough and as good’ and Burke’s social contract between the generations.)

It is easy to understand why many, perhaps most, political and community leaders would balk at the high political risks of a sustained public conversation with a view to securing social recommitment to ESD. On the other hand, returning to the epigraphs that opened this thesis and this chapter, it seems hard to believe, if governments were to facilitate a fulsome public debate, that society would endorse the nihilism of Marquise de Pompadour’s *‘après nous, le deluge’* in preference to a Kennedy’s ‘basic common link’ between humans, Burke’s contract between the generations, or even Paine’s ‘most ridiculous and insolent of all tyrannies’ of attempting to rule from beyond the grave, by means of the present generation consuming the endowment of future generations. Concern for our descendants seems to be hard-wired into humans, and references to avoiding saddling

future generations with burdens are not uncommon in other contexts.<sup>1295</sup> Surely a *fully informed* society considering GEDD would commit *genuinely* to an ESD or equivalent response, arguing only about the rate of movement towards that goal in seeking to balance the risks of moving too slowly against the costs to the current generation of moving rapidly? On the other hand, perhaps only a major environmental crisis will be sufficient to stimulate the necessary public support. On the basis that such support will exist at some point, whether resulting from conscience or crisis, the final section discusses the elements of a viable approach to ESD, learning from the policy failures examined earlier.

## 8.4 Looking Forward: Essential Components of a Viable ESD Policy

If the political will existed to pursue ESD, what would be the elements of a viable ESD policy framework? On the argument of this thesis, an ESD policy framework would contain the following components:

First, establish institutions to maintain whole-of-society support for the agreed goal in the face of the inevitable impacts of imposing ecological constraints.

Second, maintain a comprehensive informing system to support decision-making.

Third, adopt the third core objective of the NSESD as the primary objective of ESD policy: to protect biodiversity and maintain essential ecological processes and life-support systems. Given significant uncertainty as to the constraints needed to achieve this protection, the precautionary principle would apply as a supporting principle.

Fourth, reform government decision-making processes to ensure that all decisions conform to ESD requirements.

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<sup>1295</sup> See for example the remarks of the Australian Treasurer, Scott Morrison on the need to reduce social security expenditure with a view to balancing the Budget: 'Why is that important? Because we have to pay for the benefits we hand out today with today's money, not put taxes on future generations of Australians to pay for the welfare benefits today's Australians are getting. That is just simply unfair to future generations ...' (Transcript, 'Doorstop' interview with Scott Morrison MP (Treasurer), 6 February 2017, <<http://sjm.ministers.treasury.gov.au/transcript/008-2017/>> (viewed 11 June 2018)).



Fifth, a new IGAE would be needed, to support an integrated national approach in a federal system which divides environmental roles and responsibilities. As with the original, the agreement would embody a shared commitment to ESD policies and provide for cooperation. In contrast with the original, the basis for allocating roles and responsibilities would not be enumerated constitutional powers but policy effectiveness. The Australian federal system supports a range of cooperative federal arrangements including general executive cooperation through intergovernmental agreements; the creation of joint Commonwealth-State authorities;<sup>1296</sup> and cooperative legislative schemes.<sup>1297</sup>

Finally, pursue policies aimed at maximising economic welfare within the ecological constraints of this approach.

These elements are discussed below, other than welfare maximisation, which is already well-understood. They would be implemented together as an integrated approach.<sup>1298</sup>

#### **8.4.1 Elements of an Ideal ESD Policy Model: Discussion**

Even if broad support for ESD were achieved, this support would need to be maintained as measures to establish ecological constraints affected stakeholders and society more broadly. Governments should lead ongoing public discourse, but this could be complemented with a dedicated body under a mandate to keep society informed and to maintain an established consensus on the need for ESD. The Climate Commission discussed in 8.2.2 provides a precedent.

The foundation of an ESD policy framework would be an informing system, built around environmental-economic accounting given the advantages of that framework discussed in 4.4.4. Such a system would measure the nature, extent and conditions of significant ecological stocks and flows of ecosystem services, in an accounting format of ‘opening balance’, positive or negative changes, and ‘closing balance’. Appropriately informed by science, government would then need to determine, for each ecosystem, its minimum

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<sup>1296</sup> *R v Duncan; Ex parte Australian Iron and Steel Pty Ltd* (1983) 158 CLR 535.

<sup>1297</sup> See the example of the National Environment Protection Acts discussed in 3.3.3.

<sup>1298</sup> Although cast more generally and using a different analytical approach, these recommendations are broadly consistent with those proposed by Young: see M D Young, *Sustainable Investment and Resource Use: Equity, Environmental Integrity, and Economic Efficiency*, Man and the Biosphere Series Volume 9 (UNESCO and Parthenon Publishing, 1992).

'balance' to be regarded as self-sustaining, defined as the ability to maintain its quality and extent on an indefinite basis, with minimum human intervention. Continuing the accounting analogy, this state might be seen as addressing the sufficiency of balances and described as 'ecosystem sufficiency'.<sup>1299</sup> Sufficiency would need to be reassessed regularly, not only to take account of pressures such as invasive species, but also in the light of new scientific knowledge. To the extent that ecosystems met sufficiency requirements, the object of environmental policy would be to maintain or restore adequacy. Where there was uncertainty as to adequacy or actions required to maintain or restore adequacy, precaution would dictate the inclusion of a safety margin: in this respect adequacy is a descendant of SMS.<sup>1300</sup>

Government decisions would need to maintain or seek to restore ecological sufficiency and decision-making processes would need to be modified accordingly. To avoid a large centralised bureaucracy and encourage community support, ecosystem sufficiency might be managed in many instances on a bioregional basis by regional authorities, such as the 56 'National Landcare Program management units' supported under the Australian Government's National Landcare Program.<sup>1301</sup> Authorities might approve development, invest appropriated funds in maintenance and restoration, and even participate in biodiversity offset markets, trading an over-sufficiency of one asset for measures to restore under-sufficiency in another. Sufficiency levels would be reviewed and adjusted periodically, perhaps by an independent expert body.

Finally, the Commonwealth and States would need to negotiate a new IGAE. An agreement addressing ESD by reference to criteria of policy effectiveness and efficiency and rather than the constitutional division of power could reaffirm a shared commitment to ESD, defined consistently with the discussion above, and provide for shared high-level policy-setting but devolved administration, perhaps regionally based as above. The Commonwealth might establish a national institution to gather environmental information

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<sup>1299</sup> The same concept can be seen in the 'capital adequacy' and reserve requirements applied to banks by banking regulators to ensure that they remain solvent and resilient to financial pressures.

<sup>1300</sup> Although more prescriptive, at a conceptual level this is not dissimilar to the international and domestic approach to climate change, under which an expert International Panel on Climate Change informs the Conference of the Parties, which adopts an overall target, which is then supported by nationally determined targets that are measured in Australia by reference to the National Greenhouse Accounts: see <<http://www.environment.gov.au/climate-change/climate-science-data/greenhouse-gas-measurement/tracking-emissions>> (viewed 21 July 2018).

<sup>1301</sup> See Australian Government, 'National Landcare Program, Regional Land Partnerships' <<http://nrm.gov.au/regional-land-partnerships>> (viewed 26 June 2018). These regions are better known as the 'NRM [Natural Resource Management] regions: see 'NRM Regions Australia' <<http://nrmregionsaustralia.com.au/investment-by-governments-in-nrm/>> (viewed 26 June 2018).

and maintain environmental-economic accounts, somewhat analogous to functions performed by BoM and ABS, while States might legislate to establish and oversee regional bodies. The two levels of government might jointly provide for an independent body to set and review sufficiency levels. The relative success of national competition policy and water reforms over the IGAE and NSESD suggests that financial incentives and disincentives and independent oversight might increase the prospects of a successful agreement. A new IGAE might thus fund measures to increase economic efficiency to offset the impact of ecological constraints (eg to support the use of high technology in agricultural production) while also funding structural adjustment payments, conditional on meeting implementation milestones. Governments, primarily the Commonwealth, might raise the necessary revenue by taxing environmental bads (eg fossil-fuel consumption), offset as far as possible by reducing taxes that burden production (eg payroll tax). While there would likely be a net present cost to society, this is inherent in the commitment to intergenerational equity that underpins ESD.

#### **8.4.2 Conclusions**

Overall, this thesis has found ESD to be well-adapted to addressing GEDD. The failures of ESD policy in Australia, to the extent that they were due to policy factors, were attributable to an insufficient or inconsistent understanding of ESD and to inadequate policy development processes, all of which can be remedied. Not only does ESD remain capable of implementation should society wish to do so, it (and its close relative SS) remain the only viable approaches to GEDD. Unfortunately, the environment continues to degrade, meaning that achieving ESD requires progressively more-difficult decisions. Until society is ready to make a fully informed commitment to ESD, a government wishing to address GEDD might encourage a national debate on how to maintain quality of life in the long term; it might also implement a comprehensive environmental informing system to support such a debate, and it might continue to develop mechanisms that would support ESD, such as the institutions of policy coordination within government and regional governance models.

As a principle, Ecologically Sustainable Development has been and remains a success. Implemented as policy, it has been a failure. As a response to a future social call for a paradigm shift, the failures can be remedied and ESD remains in prospect.

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<b>Commonwealth Ministers with Environmental Responsibilities 1971 to 27 August 2018</b>			
<b>Ministry</b>	<b>Dates</b>	<b>Minister</b>	<b>Title</b>
McMahon	10/3/71–5/12/72	Howson, P	Minister for the Environment, Aborigines and the Arts
1 <sup>st</sup> Whitlam	5/12/72–19/12/72	Whitlam, E G	Minister for the Environment, Aborigines and the Arts
2 <sup>nd</sup> Whitlam	19/12/72–12/6/74	Cass, M H	Minister for the Environment and Conservation
3 <sup>rd</sup> Whitlam	12/6/74–6/6/75	Cass, M H	Minister for the Environment
	6/6/75–2/7/75	Cairns, J F	Minister for the Environment
	2/7/75–14/7/75	Whitlam, E G	Minister for the Environment
	14/7/75–11/11/75	Berinson, J M	Minister for the Environment
1 <sup>st</sup> Fraser	11/11/75–22/12/75	Peacock, A S	Minister for the Environment
2 <sup>nd</sup> Fraser	22/12/75–8/7/76	Greenwood, I J	Minister for the Environment, Housing and Community Development
	8/7/76–20/12/77	Newman, K E	Minister for the Environment, Housing and Community Development
3 <sup>rd</sup> Fraser	20/12/77–5/12/78	Groom, R J	Minister for the Environment, Housing and Community Development
	20/12/77–3/11/80	Ellicott, R J	Minister for Home Affairs
	5/12/78–8/12/79	Webster, J J	Minister for Science and the Environment
	8/12/79–3/11/80	Thomson, D S	Minister for the Environment
4 <sup>th</sup> Fraser	3/11/80–17/2/81	Ellicott, R J	Minister for Home Affairs and Environment
	17/2-/81–19/3/81	MacKellar M J R	Minister for Home Affairs and Environment

	19/3/81–7/5/82	Wilson, I B C	Minister for Home Affairs and Environment
5 <sup>th</sup> Fraser	7/5/82–11/3/83	McVeigh, D T	Minister for Home Affairs and Environment
1 <sup>st</sup> Hawke	11/3/83–13/12/84	Cohen, B	Minister for Home Affairs and Environment
2 <sup>nd</sup> Hawke	13/12/84–24/7/87	Cohen, B	Minister for Arts, Heritage and the Environment
3 <sup>rd</sup> Hawke	24/7/87–18/12/87	Brown, J J	Minister for Arts, Sport, the Environment, Tourism and Territories
	18/12/87–19/1/88	Richardson, G F	Minister for the Environment and the Arts
	19/1/88–4/4/90	Richardson, G F	Minister for Arts, Sport, the Environment, Tourism and Territories
4 <sup>th</sup> Hawke	4/4/90–20/12/91	Kelly, R J	Minister for Arts, Sport, the Environment, Tourism and Territories
1 <sup>st</sup> Keating	20/12-91–27/12/91	Kelly, R J	Minister for Arts, Sport, the Environment, Tourism and Territories
2 <sup>nd</sup> Keating	27/12/91–24/3/93	Kelly, R J	Minister for Arts, Sport, the Environment, Tourism and Territories
3 <sup>rd</sup> Keating	24/3/93–1/3/94	Kelly, R J	Minister for the Environment, Sport and Territories
	1/3/94–25/3/94	Richardson, G F	Minister for the Environment, Sport and Territories
	25/3/94–11/3/96	Faulkner, J P	Minister for the Environment, Sport and Territories
1 <sup>st</sup> Howard	11/3/96–21/10/98	Hill, R M	Minister for the Environment*
2 <sup>nd</sup> Howard	21/10/98–26/11/01	Hill, R M	Minister for the Environment and Heritage
3 <sup>rd</sup> Howard	26/11/01–18/07/04	Kemp, D A	Minister for the Environment and Heritage
	18/07/04–26/10/04	Campbell, I G	Minister for the Environment and Heritage
4 <sup>th</sup> Howard	26/10/04–30/01/07	Campbell, I G	Minister for the Environment and Heritage

	30/01/07–3/12/07	Turnbull, M B	Minister for the Environment and Water Resources
1 <sup>st</sup> Rudd	3/12/07–8/3/10	Garrett, P R Wong, P Y Y	Minister for Environment, Heritage and the Arts Minister for Climate Change, and Water
	8/3/10–24/6/10	Garrett, P R Wong, P Y Y	Minister for Environment Protection, Heritage and the Arts Minister for Climate Change, Energy Efficiency and Water
1 <sup>st</sup> Gillard	24/6/10–28/6/10	Garrett, P R Wong, P Y Y	Minister for Environment Protection, Heritage and the Arts Minister for Climate Change, Energy Efficiency and Water
2 <sup>nd</sup> Gillard	28/6/10–14/9/10	Garrett, P R Wong, P Y Y	Minister for Environment Protection, Heritage and the Arts Minister for Climate Change, Energy Efficiency and Water
3 <sup>rd</sup> Gillard	14/9/10–25/3/13	Burke, A S Combet, G I	Minister for Sustainability, Environment, Water, Population and Communities Minister for Climate Change and Energy Efficiency
	25/3/13–27/6/13	Burke, A S Combet, G I	Minister for Sustainability, Environment, Water, Population and Communities Minister for Climate Change Industry and Innovation
2 <sup>nd</sup> Rudd	27/6/13–1/7/13	Burke, A S Combet, G I	Minister for Sustainability, Environment, Water, Population and Communities Minister for Climate Change and Energy Efficiency
3 <sup>rd</sup> Rudd	1/7/13–18/9/13	Butler, M C	Minister for Environment, Heritage and Water Minister for Climate Change
Abbott	18/9/13–15/9/15	Hunt, G A	Minister for the Environment
1 <sup>st</sup> Turnbull	15/9/15–2/7/16	Hunt, G A	Minister for the Environment Minister for Cities and the Built Environment (acting, from 29 December 2015)

2 <sup>nd</sup> Turnbull	2/7/16–27/8/2018	Frydenberg, J	Minister for the Environment and Energy
<p>*From 1998 to 2001 climate change was the joint responsibility of several ministers, with the Australian Greenhouse Office reporting to those ministers collectively under several different arrangements, including a Ministerial Council. However, the Minister for the Environment had the principal responsibility for climate change issues. From November 2001 until the establishment of a separate climate change portfolio in 2007, more conventional arrangements applied, with the Minister for the Environment having responsibility for climate change and policy coordination achieved through Cabinet processes.</p>			
<p>Source: Adapted from Parliamentary Library; <i>Parliamentary Handbook of the Commonwealth of Australia</i>, Commonwealth of Australia, 2014, Ministries and Cabinets, Tables 40–66. Information relating to the Australian Greenhouse Office is taken from annual reports.</p>			



<b>Names of Departments with Primary Responsibility for the Environment 1971–27 August 2018</b>	
<b>Dates</b>	<b>Title</b>
10/03/71–19/12/72	Department of the Environment, Aborigines and the Arts
05/12/72–12/06/74	Department of the Environment and Conservation
12/06/74–22/12/75	Department of the Environment
22/12/75–05/12/78	Department of the Environment, Housing and Community Development
05/12/78–08/12/79	Department of Science and the Environment
08/12/79–03/11/80	Department of the Environment
03/11/80–13/12/84	Minister for Home Affairs and Environment
13/12/84–24/07/87	Department of Arts, Heritage and Environment
24/07/87–24/03/93	Department of the Arts, Sport, the Environment, Tourism and Territories
24/03/93–11/03/96	Department of the Environment, Sport and Territories
11/3/96–21/10/98	Department of the Environment
21/10/98–30/01/07	Department of the Environment and Heritage
30/01/07–03/12/07	Department of the Environment and Water Resources
03/12/07–14/09/10	Department of the Environment, Water, Heritage and the Arts
14/09/10–18/09/13	Department of Sustainability, Environment, Water, Population and Communities
18/09/13–02/07/16	Department of the Environment
02/07/16–27/08/18	Department of the Environment and Energy
Source: Departmental Annual Reports	

FOR CABINET

CONSERVATION/HERITAGE AND RESOURCE  
ASSESSMENT/DEVELOPMENT

...

ATTACHMENT B

**'Principles Relating to The Policy Framework and Decision Making Process'<sup>1302</sup>**

The underlying approach of the Government is to seek to ensure that over time the community optimises the net benefits community from its resources.

2. The framework set out below recognises that land is required by the community for many purposes, including subsistence and shelter, recreation, and the maintenance of essential ecological processes, life support systems and genetic diversity. Some uses are compatible, others not.
3. Some uses of land are flexible because they can be changed to a different form of land use. Other types of land use are inflexible because, once they are applied, the land cannot be restored to its pre-existing state at all, or not with present technology, cannot be used for other purposes, or not for a long time, or except at great cost. In between these extremes a number of combinations of uses may be possible.
4. We will never have complete information or a complete understanding of all the economic and environmental impacts of decisions on land use because scientific discovery and technological development are on-going processes, and because of resource constraints on data collection. Currently available information is widely dispersed and relatively difficult to access for decision making.
5. Evaluation of different land uses from a community view is more often than not a complex task. Priorities for different uses from an overall community viewpoint may vary over time due to changing economic, social, environmental and technical circumstances. Changing priorities will be reflected in the changing values that society, and various groups within it, place on different forms of land use. Often it may not be possible to assign objectively determined values to all possible uses; some subjective valuations will generally be required.
6. The Government has already endorsed the NCSA document by agreeing to the objectives and strategic principles and has indicated a willingness in principle to implement the Priority National Actions of the NCSA, in co-operation with development and conservation interests and the States.

<sup>1302</sup> Australian Government, 'Conservation/Heritage and Resource Assessment/Development', Appendix B, *Cabinet Submission 6124*, 2 November 1988 (NAA 14039, 6124), 17–24; endorsed by *Cabinet Minute 12025* (Amended), 15 November 1988 (NAA 14039, 6124),.

7. The four objectives and five principles identified by the NCSA under the theme of living resource conservation for sustainable development are set out below.

NCSA objectives and strategic principles

8. The four objectives already endorsed within the NCSA are:

- (a) to maintain essential ecological processes and life support systems;
- (b) to preserve genetic diversity;
- (c) to ensure the sustainable utilisation of species and ecosystems;
- (d) to maintain and enhance environmental qualities.

9. The five relevant strategic principles from the NCSA are:

- (a) to integrate conservation and development and emphasise their interdependence and common ground;
- (b) to retain options for future use;
- (c) to focus on causes as well as symptoms;
- (d) to accumulate knowledge for future application;
- (e) to educate the community about the interdependence of sustainable development and conservation.

Other principles

10. The following principles, together with the NCSA objectives and strategic principles outlined above, are considered relevant to the land use decision making process and the resolution of competing land-use claims. These have been grouped as general economic principles, land-use principles, principles applying to the decision making process, and conflict resolution principles.

A Economic principles

- 1. The efficient allocation of economic resources should be encouraged and account should be taken of the broader implications for the community of any proposal.
- 2. The community should get an appropriate return for the use of the nation's resources.
- 3. The user pays principle should apply where feasible.
- 4. The polluter pays principle should be observed.
- 5. Evaluation of costs and benefits should include quantifiable and unquantifiable factors.
- 6. Risk assessments and the costs associated with uncertainty should be reflected in evaluation.

## B Land use principles

1. There should be an integrated approach to conservation and development, by taking both conservation and development aspects into account at an early stage. Opportunity for application of more than one use for land should be left open unless single use only is clearly justified.
2. Representative samples of adequate size should be preserved of ecosystems and species and provisions made for the creation of a range of reserves serving recreation, heritage and amenity needs, including wilderness.
3. In assessing cultural and natural values their distribution should be considered in local, national and global contexts, as appropriate.
4. Priority for full protected status should be given to ecosystems and areas of exceptional diversity and items and places of exceptional significance; refugia should be preserved wherever possible.
5. Parks and reserves should be large enough to conserve species under adverse conditions and in the longer term.
6. The rate, extent and manner of use or consumption of renewable resources should be such that, aided in many cases by human intervention, the resource base is sustained.
7. Certain protected areas and incompatible uses may require buffer zones to achieve the policy objectives for the areas.
8. The developer should meet the costs of rehabilitation to agreed standards.
9. Where a resource has already been overused in sustainable use terms, provision should be made for rehabilitation by pursuing effective land use management, including lower levels of usage or even short or longer term isolation from use.

## C Principles applying to the decision making process

1. Inquiry, nomination and other processes which come into operation before or after the government takes decisions affecting land use, should be identified and adequately publicised.
2. Rights of interested parties (including public interest groups and individuals) in the decision making process should be made clear and adequately publicised.
3. Because of the impacts of some decisions on the interests of the States/Territories, on Aboriginal communities, on private property rights and on the wider community, interested

parties should be able to put their views at an appropriate stage or stages in the process, and equitable consideration should be given to their views and interests.

4 Decisions should be taken on the basis of the best possible information already available or available within a defined time. As a general rule decisions should be delayed to get more information if the expected benefit is greater than the cost of getting the information.

5. Developmental and environmental considerations should both be taken into account at an early stage in the decision making process.

6. Given our limited capacity to anticipate the needs and aspirations of future generations, and the likelihood that pertinent information and technology relating to the use and management of particular areas may emerge over time, government decisions on land use management should provide flexibility by seeking to retain options in respect of future uses.

7. Evaluation of various uses should include identification and examination of the benefits and costs associated with options, the distribution of costs and benefits, and an assessment of risks, with the evaluation including quantifiable and unquantifiable benefits and costs.

8. The co-operation of State and Territory Governments, the Aboriginal communities, private property holders and members of the public should be sought as appropriate in the management of protected areas or protected values.

9. Compensation should be considered where private property rights are adversely affected.

10. Costs to both governments and interested parties associated with the decision-making process should be contained as much as possible.'

11. There should be appropriate processes and mechanisms to facilitate consultation and interaction among Commonwealth agencies and between the Commonwealth and outside bodies.

#### D Conflict resolution

1. Commonwealth decisions, policies and management regimes may provide for additional uses that are compatible with the primary purpose values of the area, recognising that in some cases both conservation and development interests can be accommodated concurrently or sequentially and in other cases choices must be made between alternative uses or combinations of uses.

2. Evaluation of competing claims should recognise that some uses are flexible and easily changed, are inflexible, and that various combinations of uses are possible between these extremes.
3. Because some environmental impacts are irreversible and hence potentially reduce future economic welfare and environmental amenity, options should be kept open for the future to the greatest extent possible.
4. Resource use decisions should seek to optimise the net benefits to the community from the nation's resources, having regard to efficiency of resource use, environmental considerations and an equitable distribution of the return on resources.
5. Development (including exploitation of non-living resources) should take account of the cultural and natural values that may be affected by the development activities.
6. Decisions should be well informed; recognising that the inadequacy of the present knowledge base is a constraint on decision making, the continuing significance of living and non-living resources to Australia's economic welfare and the present and potential scientific research and innovation, efforts should be made to improve the knowledge base including through
  - geoscientific surveys
  - assessments of mineral prospectivity
  - biological surveys and analysis of protected status
  - heritage surveys and analysis of protected status
  - land capability surveys and assessments
  - other resource and economic assessment procedures.
7. Exploration for, and assessment of, living and non-living resources should be encouraged subject to appropriate environmental controls.
8. The intensity of resource assessment procedures should be determined with due regard to established natural and cultural values. In protected areas any procedures that may have a significant impact on the cultural or natural values being protected should be subjected to environment impact assessment processes.
9. In protected areas any significant should be subjected to environment impact assessment processes.

**Extracts from ‘Australia's Objectives, Approaches and Priorities for the Preparatory Committee for the United Nations Conference on Environment and Development (UNCED), Brazil July 1992’<sup>1303</sup>**

...

**B. Application of Principles**

8. Seek to ensure that decisions and recommendations of the Conference are consistent with the following principles:

- (a) precautionary principle — In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Especially where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used reason for postponing measures to prevent environmental degradation.
  - (b) equitable sharing of international costs and benefits — the costs and benefits of or inaction should be shared equitably — no State should bear a disproportionate part of the burden of adjustment or global environmental change.
  - (c) intergenerational equity — the present generation should ensure that the next generation is left with an environment that is at least as healthy, diverse and productive as the one the present generation experiences.
  - (d) irreversibility — public and private decisions should be based on careful evaluation to avoid, wherever possible, irreversible damage to the environment.
  - (e) ensuring that environmental assets are appropriately valued — valuation of environmental assets should take into account all relevant values including economic, ecological, aesthetic and social values.
  - (f) polluter pays — those who generate or pollution and waste should bear the cost.
  - (g) user pays — the users of goods and services should pay prices based on the full life cycle costs of providing the goods and services, including the use of natural resources (including the global commons), and the ultimate disposal of any wastes.
  - (h) international trade consistency — there should be consistency between international trade and environmental obligations.
  - (i) trade distortion and proportionality — the impact of response strategies envisaged under international environment agreements should be the distorting and in proportion to the environmental problems being addressed.
9. Support the identification of longer term (ie on a 20 to 30 year timeframe) economic, social and environmental goals and of impediments to achieving these

<sup>1303</sup> Australian Government, ‘United Nations Conference on Environment and Development (UNCED: Brazil 1992) — Australian Objectives for Meetings of Preparatory Committee’ *Cabinet Submission 7800*, above n 368, Attachment A.

## Extracts from 'Ecologically Sustainable Development in International Development Cooperation: An Interim Policy Statement (1990)<sup>1304</sup>

...

### **AIDAB [AUSTRALIAN INTERNATIONAL DEVELOPMENT ASSISTANCE BUREAU]: SUPPORT FOR ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

AIDAB fully supports the concept of ecologically sustainable in the WCED's report, *Our Common Future*. Environmentally sound and sustainable management of natural resources is of fundamental importance.

...

From discussion within the Australia community and internationally, sustainable development is coming to be seen as a set of principles which transcend a purely economic framework and which are capable of integrating ecological and economic considerations. A n economic framework alone is inadequate for the task of capturing the fundamental problems surrounding ecological sustainability, such as intergenerational equity and conservation of biological diversity. Ecological sustainability emphasises the qualitative aspects of development, as opposed to the more traditional emphasis on quantitative growth. Based upon this view, the guiding principles of ecologically sustainable development are seen to be:

#### ***Intergenerational equity***

The present generation should ensure that the next generation is left with an environment that is at least as healthy, diverse and productive as the one the present generation experiences.

#### ***Conservation of biological diversity and ecological integrity***

Conservation of biological diversity and ecological integrity should be a fundamental consideration in all economic activity. The non-evolutionary loss of species and genetic diversity needs to be halted and future evolutionary processes secured.

#### ***Constant Natural Capital***

Human made capital cannot automatically be assumed to be a substitute for natural capital. Natural capital (eg biological diversity, healthy environments, freshwater supplies, productive soils) must be maintained or enhanced from one generation to the next.

#### ***Anticipatory and precautionary policy approach***

Policy decisions should err on the side of caution. The burden of proof lies with developers to demonstrate that their activities are ecologically sustainable.

#### **Equity**

Equity should be achieved or maintained for human development, including education, population control, the status of women, the aged, children and indigenous peoples and relations between and within nations. Equity should be both intragenerational and intergenerational.

<sup>1304</sup> Australian International Development Assistance Bureau, 'Ecologically Sustainable Development in International Development Cooperation: An Interim Policy Statement' (AGPS 1990)



***Limits on natural resource use***

It is necessary to recognise the limits on the capacity of the environment to supply renewable resources and to absorb wastes.

***Qualitative development***

In using resources, increases in the quality of human welfare rather than quantitative growth is a key objective. Care must be taken that 'development' does not lead to the fragmentation of communities and their cultures.

***Pricing environmental values and natural resources***

As far as possible prices for natural resources should be set to recover the full social and environmental costs of their use and extraction. However, many environmental values cannot be priced in monetary terms and hence pricing policies will of a broader framework for decision making.

***Global and regional perspectives***

A global and regional perspective is needed to ensure that Australia does not encourage the movement of environmental problems from country to country.

***Efficiency***

Efficiency of resource use must become a major objective in economic policy.

***Resilience***

Economic policy needs to focus on developing a resilience to external economic or ecological shocks.

***Community Participation***

Strong community participation is a pre-requisite for effecting a smooth transition to ecologically sustainable development. It represents a sound method for ensuring success in development cooperation, provides excellent information and good motivation through establishing strong local ownership of a project or program.

***Information***

To improve and refine good economic and ecological planning, be made available to national governments, corporations and local communities.

...

## Appendix 6

### Publications under the Australian Environmental Statistics Project (AESOP)

- AESOP-1 Tony Friend and Keith McKenry, *International Experience in the Development of Environmental Statistics* (October 1978)
- AESOP-2 Tony Friend, *Preliminary Proposal for a Stress-Response Approach for the Organisation of a System of Environmental Statistics for Australia* (November 1978)
- AESOP-3 Donald Firth, Lorraine Tomlins, Keith McKenry and Charles Ross, *Australian Environment Statistics Available at a National or State Level — a Preliminary Compilation* (April 1979)
- AESOP-4 Keith McKenry, *The Australian Environmental Statistics Project (AESOP): A Project Specification* (June 1979)
- AESOP-5 Keith McKenry and Don McRae, *Towards a National Approach to Environmental Statistics — Recent Developments in Australia* (September 1979)
- AESOP-6 Charles Ross and Lorraine Tomlins, *Sources of Australian Environmental Data: a Survey of Commonwealth Data Holdings* (October 1979)
- AESOP-7 Keith McKenry and Charles Ross, *An Appraisal of the Need for and Benefits of the Australian Environmental Statistics Project (AESOP)* (March 1980)
- AESOP-8 Peter Laut and Keith McKenry, *Towards a Spatial Base for a National System of Environmental Statistics Based upon Aggregations of Local Government Areas — Recent Australian Experience* (May 1980)
- AESOP-9 Keith McKenry, *An Emerging Framework for a System of Australian Environmental Statistics* (January 1981)

NB: See bibliography for full publication details. Other AESOP publications are:

Peter Laut, D Firth and T A Paine, *Provisional Environmental Regions of Australia* (CSIRO 1980)

Department of Home Affairs and Environment, *Australian Environmental Statistics 1980* (AGPS 1980).

**Australian Bureau of Statistics Environmental Information Products and  
Publications Related to the Environment**

(In chronological order)

5206.0	'Natural Resource and Environmental Accounting in the National Accounts', Feature Article, in March Quarter 1990 Australian National Accounts: National Income and Expenditure 1990
4140.0	Australia's Environment: Issues and Facts 1992
4604.0	Energy Accounts for Australia 1995
5241.0	National Balance Sheets for Australia: Issues and Experimental Estimates 1995
4601.0	Australians and the Environment 1996
4650.5	Conservation of Energy, Water and the Environment, Western Australia, November 1992
4602.0	Environmental Issues: People's Views and Practices 1993
4606.0	Sustainable Agriculture in Australia, 1993–94
4601.0	Australians and the Environment, 1996
4608.0.40.001	Mineral Account, Volume Change Tables, Australia, 1994 to 1996
4608.0	Mineral Account, Australia, 1996
4605.0	Australian Transport and the Environment, 1997
4607.0	Fish Account, Australia, 1997
4603.0	Environment Protection, Mining and Manufacturing Industries, Australia, 2000–01
4648.0.55.001	Detailed Energy Statistics, Australia, 2001–02
4649.0.55.001	Energy Statistics, Australia, 2001–02
4615.0	Salinity on Australian Farms, 2002
4616.1	Domestic Water Use, New South Wales, Oct 2002
4611.0	Environment Expenditure, Local Government, Australia, 2002–03
4616.5.55.001	Domestic Water Use, Western Australia, Oct 2003
4617.0	Environment by Numbers: Selected Articles on Australia's Environment, 2003
4623.0	Characteristics of Australia's Irrigated Farms, 2000–01 to 2003–04
4647.0.55.001	Research Paper: Developing an Alternative View of Electricity and Gas Supply Activity in Australia 2003–04
4618.4	Domestic Use of Water and Energy, South Australia Oct 2004
4624.0	Natural Resource Management on Australian Farms, Preliminary, 2004–05
4610.0.55.001	Proposed Methodology for Producing Regional Water Use Estimates, 2004–05
4610.0.55.004	Research Paper: An Experimental Monetary Water Account for Australia, 2003–04
4610.0.55.002	Experimental Estimates of Regional Water Use, Australia, 2004–2005
4610.0.55.003	Water Access Entitlements, Allocations and Trading, 2004–05
4651.0	Land Management: Fitzroy and Livingstone Shires Queensland, 2004–2005

- 4610.0.55.005 An Experimental Monetary Water Account for Australia, 2004–05
- 4610.0.55.007 Water and the Murray-Darling Basin — A Statistical Profile, 2000–01 to 2005–06
- 4616.0.55.001 Research Paper: A Methodology for Estimating Regional Agricultural Water Use Sept 2006
- 4652.5 Domestic Use of Water and Energy, WA, Oct 2006
- 4621.1 Domestic Water and Energy Use, New South Wales, Oct 2006
- 4620.0 Natural Resource Management on Australian Farms, 2006–07
- 4625.0 Farm Management and Climate, 2006–07
- 4602.0 Environmental Issues: People's Views and Practices, Mar 2007
- 4647.0 Alternative View of Electricity and Gas Supply Activity, 2006–07 to 2007–08
- 4610.0.55.006 Information Paper: Methods of estimating the Gross Value of Irrigated Agricultural Production, 2008
- 4619.0 Land Management Practices in the Great Barrier Reef Catchments, Preliminary 2008–09
- 4619.0.55.001 Land Management Practices in the Great Barrier Reef Catchments, Final, 2008–09
- 4619.0.55.002 Land Management Practices in the Great Barrier Reef Catchments, Experimental Estimates, 2008–09
- 4602.3 Queensland Water and Energy Use and Conservation, Oct 2009
- 4656.5 Household Choices Related to Water and Energy, WA, October 2009
- 4653.0 Environment and Energy News, Dec 2009
- 4613.0 Australia's Environment: Issues and Trends, Jan 2010
- 4614.0.55.001 Energy in Focus: Energy Use in Australian Homes, Mar 2010
- 4655.0.55.001 Towards an integrated environmental-economic account for Australia, 2010
- 4614.0.55.002 Energy in Focus: Energy Efficiency of Australian Homes, Apr 2010
- 4614.0.55.003 Energy in Focus: Business Expenditure on Energy Research and Development Nov 2010
- 4602.0.55.006 Waste Account, Australia, 2010–11
- 4602.2 Household Water and Energy Use, Victoria, October 2011
- 4629.0.55.001 Discussion Paper: Environmental taxes in Australia — Experimental new statistics 2000–2011
- 4630.0 Agricultural Resource Management Practices, Australia, 2011–12
- 1370.0.00.002 Measures of Australia's Progress — Aspirations for our Nation: A Conversation with Australians about Progress 2011–12
- 4609.4.55.001 Land Account: South Australia, Experimental Estimates, 2006–2011
- 4602.0.00.002 Community Engagement with Nature Conservation, Australia, 2011–12
- 4660.0 Energy Use, Electricity Generation and Environmental Management, Australia 2011–12
- 4626.0.55.001 Environmental views and behaviour, 2011–12
- 4670.0 Household Energy Consumption Survey, Australia: Summary of Results, 2012
- 1370.0.55.001 Measures of Australia's Progress: Summary Indicators 2012

- 4670.0.30.001 Microdata: Household Energy Consumption, 2012
- 4671.0 Household Energy Consumption Survey, User Guide, Australia, 2012
- 4602.0.55.002 Environmental Issues: Waste Management, Transport and Motor Vehicle Usage Mar 2012
- 4628.0.55.001 Completing the Picture — Environmental Accounting in Practice, May 2012
- 4609.0.55.002 Land Account: Victoria, Experimental Estimates, 2012
- 4602.0.55.003 Environmental Issues: Water use and Conservation, Mar 2013
- 4655.0.55.002 Information Paper: Towards the Australian Environmental-Economic Accounts 2013
- 4609.0.55.003 Land Account: Queensland, Experimental Estimates, 2013
- 4602.0.55.005 Waste Account, Australia, Experimental Estimates, 2013
- 1370.0 Measures of Australia's Progress 2013
- 1370.0.00.003 Information Paper: Measures of Australia's Progress Proposed Statistical Indicators 2013
- 4604.0 Energy Account, Australia, 2013–14
- 4610.0.55.008 Gross Value of Irrigated Agricultural Production, 2013–14
- 4610.0 Water Account, Australia, 2013–14
- 4602.0.55.001 Environmental Issues: Energy Use and Conservation, Mar 2014
- 4603.0.55.001 Discussion paper: Towards an Environmental Expenditure Account, Australia, August 2014
- 4609.0.55.001 Land Account: Great Barrier Reef Region, Experimental Estimates, 2014
- 4618.0 Water Use on Australian Farms, 2014–15
- 4627.0 Land Management and Farming in Australia, 2014–15
- 4631.0 Employment in Renewable Energy Activities, Australia, 2014–15
- 4680.0.55.001 Information Paper: An Experimental Ecosystem Account for the Great Barrier Reef Region, 2015
- 4655.0 Australian Environmental-Economic Accounts, 2016
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